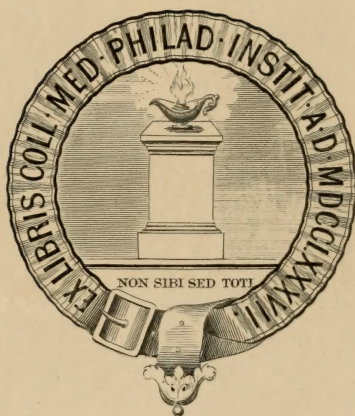




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Keep for Editor

THE

Indiana Journal of Medicine.

Edited by

THAD. M. STEVENS, M. D.

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Dr. Hays

INDIANA JOURNAL OF MEDICINE.

VOL. III.

MAY, 1872.

No. 1.

Original Communications.

BIBLICAL MEDICINE.

BY G. W. H. KEMPER, M. D., MUNCIE, IND.

UNDER the above title I propose to submit a digest of the medical, surgical, and obstetrical cases and diseases enumerated in the Bible. I have aimed to have my article accurate and complete, and yet concise as possible. My work is gleaned from a careful reading of the Bible, and occasionally I have availed myself, also, of such collateral aid as might give additional light.

The pathography of biblical diseases is quite meagre. Occasionally the disease is named, but more commonly we meet with simply the vague expression, "fell sick," or "very sick." Such cases will be collected under the heading of "Unknown Diseases." I prefer to accept the name of each disease as given by the sacred authors.

The several cases mentioned are, doubtless, but a small proportion of either numbers or varieties of diseases extant in Egypt and Palestine. Among the curses mentioned for disobedience in Deut. xxviii, are "great plagues" and "sore sicknesses." "Moreover he will bring upon thee all the diseases of Egypt, which thou

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wast afraid of." "Also every sickness and every plague which is not written in the book of this law, them will the Lord bring upon thee." In the New Testament we frequently meet with such expressions as "all manner of sickness," "all manner of diseases," "divers diseases and torments," "infirmities," etc.

The first mention of any disease is in Gen. xii: 17: "And the Lord plagued Pharaoh and his house with great plagues." Josephus says God sent a "distemper" upon him. This was about 1,900 years B. C.

A terrible fatality accompanied the plagues and pestilences of the Bible, and the number of those who perished by violence, flood, wars, famines, etc., is immense. The seeds of death sown by the fall of man have truly been fruitful. The first man born into the world slew the next! But with all these dark pictures there is mingled a bright side—which the Christian loves to contemplate—reflected from a purer and better world, where this same book informs us "the inhabitant shall not say I am sick."

The following is a condensed table of the cases which, in connection with the diseases, will be treated separately and in order:

MEDICAL.—Fever, 2; Lunacy, 2; Possessed of Devils, 10; Paralysis, 5; Dropsy, 1; Dysentery, 1; Malingering, 1; Syncope, 2; Leprosy, 21; Boils, 1; Masturbation, 1; Unknown, 27. Total, 74.

SURGICAL.—Injuries, 3; Fractures, 4; Wounded, 6; Serpent bite, 1; Amputations, 4; Deformities, 3; Blind, 6; Eyes put out, 2; Blind and dumb, 1; Dumb, 1; Deaf, 1. Total, 32.

OBSTETRICAL AND DISEASES OF WOMEN.—Premature birth, 1; Twins, 2; Tedious labor, 1; Menstruation, 2; Bloody issue, 1; Sterility, 10. Total, 17.

MEDICAL.

PHYSICIANS.—The first mention of our profession is in

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Gen. 1: 2. This was about 2,370 years A. M; 1,803 years B. C., and 1,343 years before the birth of Hippocrates. They are spoken of ten other times as follows: 2d Chron. xvi: 12; Job xiii: 4; Jer. viii: 22; Matt. ix: 12; Mark ii: 17, and v: 26; Luke iv: 23; v: 31, and viii: 43; and lastly, Col. iv: 14. Luke, one of the twelve apostles, was a physician, and died a martyr to the Christian religion.

The curious will find a singular chapter extolling the medical profession, by turning to the Apocrapha, Eccles. xxxviii.

FEVER—AGUE.—The references to fever are but few. In Lev. xxvi: 16, "The burning ague" is one of the diseases to be incurred for disobedience. In Deut. xxviii: 22, "fever" is enumerated with other diseases. I find no other reference to fever in the Old Testament. At Matt. viii: 14, the case of Peter's wife's mother is mentioned. She was confined to her bed with what Luke styles "a great fever." Her friends were anxious for her welfare, as they frequently called the attention of Jesus to her. The second case is given in John iv: 46, of a certain nobleman's son who was sick at Capernaum. I presume it was a case of fever, as it is stated in the 52d verse "the fever left him." The particular type of these cases is unknown. The country warrants the conclusion that it was malarial, as such fevers are incident to Palestine at the present day. Josephus narrates the case of a King, Alexander Janneus, who "had a quartan ague which held him three years." Engaging in martial affairs he soon died of his disease.

CONSUMPTION.—This is another one of the diseases mentioned with which the Jews were threatened for disobedience. It occurs but twice: Lev. xxvi: 16, and Deut. xxviii: 22. It designates some wasting disease, the exact character of which is unknown. Hectic fever is well delineated in Is. xxxviii: 12: "He will cut me

off with pining sickness: from day even to night wilt thou make an end of me."

PESTILENCE OR PLAGUE.—These terms are frequently used generically to signify an exceedingly fatal malady. The first attack of plague is mentioned in Num. xi: 33: "And while the flesh was yet between their teeth, ere it was chewed, the wrath of the Lord was kindled against the people, and the Lord smote the people with a very great slaughter." It is mentioned again in Num. xv: 36, and xvi: 46-49. The deaths in the latter epidemic numbered 14,700. Another terrible plague is recorded in Num. xxv. Some have regarded this epidemic of Baal-pear as syphilitic. The deaths numbered 24,000. This particular epidemic is referred to again in Num. xxxi: 16, 17; also Josh. xxii: 17.

Another fatal pestilence is mentioned in 2d Sam. xxiv: 15-25. Josephus says of this:

"God sent a pestilence and a mortality upon the Hebrews; nor did they die after one and the same manner, nor so that it was easy to know what the distemper was. Now, the miserable disease was one indeed, but it carried them off by ten thousand causes and occasions, which those that were afflicted could not understand; for one died upon the neck of another, and the terrible malady seized them before they were aware, and brought them to their end suddenly, some giving up the ghost immediately with very great pains and bitter griefs; and some were worn away by their distempers, and had nothing remaining to be buried, but as soon as ever they fell were entirely macerated; some were choked, and greatly lamented their case, as being also stricken with a sudden darkness; some there were who, as they were burying a relation, fell down dead, without finishing the rites of the funeral. The disease began with the morning and lasted till the hour of dinner." Both Josephus and the Bible state the deaths at 70,000. This graphic description accords with that given in Zach. xiv: 12:

"Their flesh shall consume away while they stand upon their feet, and their eyes shall consume away in their holes, and their tongues shall consume away in their mouths."

The Psalmist refers in graphic language in Ps. xci, to the security of the godly against the pestilence. Pestilences were foretold in Matt. xxiv: 7.

LUNACY.—In Dan. iv: 33, it is stated that Nebuchadnezzar "was driven from men, and did eat grass as oxen." It was probably a species of monomaniacal insanity—*zoanthropic*. Similar cases have often been reported. Esquirol states that a nobleman of the court of Louis XIV was in the habit of frequently putting his head out of a window in order to satisfy the urgent desire he had to bark. Griesinger reports numerous cases where insane persons have imitated the habits of certain animals. There were lunatics in the days of the Saviour, for it is stated that he healed such. Matt. iv: 24. In Matt. xvii: 15 is a case of a man "lunatic and sore vexed." Jesus rebuked the devil and he was cured instantly. Madness is mentioned in Deut. xxviii: 28, and Zech. xii: 4.

POSSESSED OF DEVILS.—Under the names of "evil spirits" and "possessed of devils," are mentioned a remarkable class of cases. It was a common belief among the Jews, except the Sadduces, that demons took possession of human bodies, and that such possession showed itself visibly in bodily disease or mental derangement. By some persons the whole account is believed to be merely symbolic, without basis of fact. By others, "that our Lord and the evangelists, in referring to demoniacal possession, spoke only in accommodation to the general belief of the Jews, without any assertion as to its truth or its falsity." That this was a specific affection, I think, will appear from the following considerations: 1. They expressed themselves in a way different from epileptic or insane persons, and answered with pro-

priety questions propounded to them. 2. Demons departed from persons and entered into swine. 3. Demoniacs knew what deranged persons could not of themselves know, viz.: that Jesus was the Son of God, the Messiah, etc. 4. Jesus spoke to demons and asked their name, and they answered Him. He threatened them—commanded them to be silent—to depart and not return, and, finally, Jesus asserts himself that he cast out devils.

I will take up the cases in detail. The first is that of Saul, 1st Sam. xvi: 14–23. He was troubled by an “evil spirit,” and received benefit from the music of David’s harp. It revisited him, however, 1st Sam. xviii: 10, and xix: 9. Two other cases are recorded in Matt. viii: 28. Another in Matt. ix: 32, and another Matt. xii: 22, and again another in Matt. xv: 22. In Matt. xvii: 15, is a case before referred to as being complicated with lunacy. Luke’s description (ix: 39) of this case accords well with a case of epilepsy. An eighth case is given in Mark i: 23. The ninth case is that of Mary Magdalene, out of whom were cast “seven devils,” showing a plurality.

Numerous other cases are referred to, but none specified. Matt. iv: 24; viii: 16; Mark i: 34. The nine cases given were healed by Jesus. The healing power was also granted to the apostles, but they failed in the case narrated in Matt. xvii: 15, 16. Seven sons of Sceva once attempted to cast out devils and received wounds and disgrace for their moral quackery. Acts xix: 13–16.

PARALYSIS.—A case is given in 1st Kings xiii: 4–6. The hand of Jeroboam “dried up, so that he could not pull it in again to him.” The Lord was entreated for its restoration, and it “became as it was before.” A second case is given in Matt. viii: 6, of a servant who laid “sick of the palsy.” A third is recorded in Matt. ix: 2. Another in Matt. xii: 10, of a man who had a withered hand. All of these cases narrated by Matthew were healed by the Saviour. In Acts ix: 33, there is an

account of a man named Eneas, "which had kept his bed eight years and was sick of the palsy." He was healed by Peter in the name of Christ. These five cases, alone, are specified, although the disease was a common one. We read in Acts viii: 7, "and many taken with palsies, and that were lame, were healed." Palsy is mentioned in Matt. iv: 24.

SCURVY.—This word occurs twice, Lev. xxi: 20, and xxii: 22. It does not appear to be synonymous with our present affection known by the same name, but it probably indicated some unsightly cutaneous complaint.

DROPSY.—This disease is but once mentioned, and that in the case of a man whom the Saviour healed. Luke xiv: 2.

DYSENTERY.—Acts xxviii: 8, reads: "And it came to pass that the father of Publius lay sick of a fever and of a bloody flux: to whom Paul entered in, and prayed, and laid his hands upon him, and healed him." See also "Jehorom" under "Unknown Diseases."

MALINGERING.—David at one time feigned madness to escape the scrutiny of Achish. He "scrabbled on the doors of the gate, and let his spittle fall down upon his beard." 1st Sam. xxi: 13. The ruse was successful.

SYNCOPE.—Jonah once fainted (?) from the excessive heat of the sun. Jon. iv: 8. Daniel's illness begun with syncope. Dan. viii: 27.

EMERODS.—This affection is first mentioned in Deut. xxviii: 27. It is described as an epidemic in 1st Sam. v. It occurred among the Philistines owing to the detention of the ark of God among them. It followed the movement of the ark to five different cities, viz.: Ashdad, Ekron, Gath, Gaza and Askalon. Josephus styles it a "dysentery or flux," and says that it was "a sore distemper that brought death upon them very suddenly; for before the soul could, as usual in easy deaths, be well loosed from the body, they brought up their entrails, and vomited up what they had eaten, and what was

entirely corrupted by the disease." It had some analogy to cholera. Its progress was checked by returning the ark to the Israelites, as detailed in 1st Sam. vi.

LEPROSY.—The first mention of this disease is in Ex. iv : 6, where it showed itself on the hand of Moses. It was a miracle, and possibly wrought to acquaint Moses with its character, as such knowledge was afterwards highly necessary.

The diagnostic points of leprosy detailed in Lev. xiii, are as follows: It begins as a rising, scab, or bright spot in the skin. The hair soon turns white. The disease gradually extends deeper than the skin. These two last conditions were considered pathognomonic. "Raw flesh" was an unfavorable symptom. Some difficulty existed in the early recognition of the disease. The patient was brought before the priest every seventh day, and the progress or decline of the disease noted. There were several kinds of leprosy. A mild variety existed, which was regarded as innocuous. Lev. xiii : 38, 39. A more malignant variety attacked vigorously the deep seated structures. The rites for cleansing lepers are detailed in Lev. xiv, and are too lengthy for quotation. The leper was isolated while his disease remained, and he was required by the Law of Moses to notify others of his condition by crying, *unclean ! unclean !*

The second case was Miriam, Num. xii : 10. In 2d Kings v : 1, is the case of Naaman, who was directed by Elisha, the prophet, to go and wash seven times in the river Jordan. After some hesitation he complied, and was healed. Gehazi, a servant of Elisha, told a falsehood to Naaman in order to secure from him a present, and as a punishment for this crime was himself visited with leprosy. In 2d Chron. xxvi : 19–21, is an account of Uzziah, a King, who was visited with leprosy, and remained so until the day of his death. Four lepers are mentioned in 2d Kings vii : 3. Another is mentioned in Matt. viii : 2; and still another in Matt. xxvi : 6. Ten

are mentioned in Luke xvii: 12. These make a total of twenty-one cases. All were healed but Gehazi and Uzziah. We read in Luke iv: 27: "And many lepers were in Israel in the time of Eliseus the prophet; and none of them were cleansed saving Naaman the Syrian." There is no positive evidence as to what was meant by "leprosy of houses," in Lev. xiv: 34-53.

BOILS.—This malady was the sixth plague visited upon the Egyptians. Ex. ix: 9-11. The boils broke forth with blains—probably violent ulceration—inflammation. Mention is again made in Lev. xiii: 18-23. In 2d Kings xx, is detailed the sickness of King Hezekiah, who was afflicted with a "boil," possibly a carbuncle. Josephus says he suffered, also, mentally from the fact that he was about to die childless, and thus leave no successor. Isaiah prescribed a lump of figs for the boil and he recovered.

ITCH is mentioned but once. Deut. xxviii: 27.

BOTCH is applied to some disease in Deut. xxviii: 27-35. It is probably synonymous with boil.

SCAB is mentioned in Lev. xiii, as a sign of leprosy, and alone in Deut. xxviii: 27. This figurative language exists in Isaiah iii: 17: "Therefore the Lord will smite with a scab the crown of the head of the daughter of Zion."

BALDNESS is referred to in Lev. xiii: 42, and xxi: 5; Is. xv: 2; Ezekiel xxvii: 31, and xxix: 18.

[To be Continued.]

REPORT OF A CASE.

BY J. F. WHITE, M. D., ELIZAVILLE, IND.

Was called at 10 o'clock, A. M., August 24th, to see H. C., aet. 8 years. Upon my arrival I learned that two days before he was riding on the running gears of a wagon, and that he fell off and one of the hind wheels ran diagonally across the right side of his neck; without

complaining of being hurt, he immediately resumed his journey and returned home at noon. At 1 P. M., he complained of being cold, and had every symptom of a chill, simultaneously with his younger brother. Fever supervening, the two were quite restless until toward morning. The next morning both were comparatively well, so much so that my patient went to a neighbor's on an errand, and after returning engaged in play with his brother, but was somewhat dull and did not seem to relish his sports as usual. In the evening fever again came up, and they both spent a very restless night.

Condition at time of visit. Frontal headache, tongue heavily coated with a yellowish white fur, bowels constipated, abdomen tympanitic, fetid breath, dry skin, temperature 105 far., pulse 115 full but compressible, urine high colored but normal in quantity.

On inquiring if he suffered pain anywhere, he referred to the headache only. He stated that his neck had never hurt him at any time since the wagon wheel ran over it. There was no appearance of contusion, no abrasion, no tenderness to the touch, no stiffness of the muscles, and he seemed to move his head with as much freedom as he ever did. In short all signs of injury to the neck were negative. Diagnosis, remittent fever and worms.

Treatment:—R. Hydrag chlo. mit., grs. vj; pulvis jalapa, grs. xvj; santonin, grs. vj; mix div. powders, 3 sig. One powder every three hours, to be followed with castor oil two hours after last powder. Febrifuges and antiperiodics as usual in such cases.

12½ P. M., recalled. On my arrival I found patient just emerging from a convulsion, body bathed in a copious perspiration, and slightly inclined to left side, partially unconscious, urine freely voided during paroxysm, pupils widely dilated, respiration frequent and labored, pulse 135. Owing to a characteristic, peculiar to the children of this family, to have convulsions during most

febrile attacks, I was not at all solicitous in regard to this case; ordered cathartic powders continued, warm sponge baths every two hours, or oftener if necessary, and bromide of potassium in full doses.

3:15 P. M., recalled. Patient has had four convulsions since my last visit at 12:30; his younger brother also manifesting symptoms. Bowels not moved, the bathing not attended to, body still more inclined to left side, face deadly pale, eyes fixed and prominent, body bathed in a cold clammy perspiration, in fact *all* the symptoms of that most terrible disease, Tetanus, were present in this case. The heart's pulsations were 150 per minute.

Treatment, bromide of potassium continued, and chloroform by inhalation, enemata to move bowels without any result. I vainly hoped the chloroform would produce relaxation, but the paroxysms gradually became more and more severe until partial pleurosthotonos and complete opisthotonos affected our little patient.

7 P. M., at this time Dr. Reagan, who had been sent for as counsel, arrived. Treatment—continued bromide of potassium every half hour, with blister to spine. Repeated enemata and discontinued chloroform at counsel's suggestion.

11 P. M. Bowels not moved; paroxysms not so severe, but attribute their amelioration to the exhausted condition of my patient. At this time my partner, Dr. Sims, who had, at my suggestion, been requested to see this patient, arrived with hydrate of chloral, which was substituted for the bromide in doses of five grains every half hour for three hours, with no appreciable effect, without it was to weaken (?) the heart's action.

At this time, 2 A. M., patient so much exhausted and swallowed with such difficulty, the chloral was discontinued and the bromide given hourly, with the addition of some bland and nourishing soup.

7 A. M. Patient unable to swallow and dying. Discontinued all medicines.

At 9 A. M. patient died, completely exhausted and in a perfectly rigid condition, which remained until six hours after death. Length of time patient sick sixty hours; from the time of the first convulsion twenty-one hours.

His younger brother, taken, as before stated, at the same time, progressed favorably, through an ordinary attack of remittent fever.

The next morning, the 26th, his mother was taken with a like attack, and was convalescent within the week.

Query—Did this patient sustain sufficient injury from the wagon wheel to occasion the Tetanic spasms, or was it the fever and the supposed complication of worms.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT.

FRACTURE OF HANDLE OF MALLEUS.—A man, aet. 45, standing near a train of freight cars, was struck in the back by an engine passing behind him, and was thrown violently against a car. He was insensible for a short time, and on recovering from the shock, complained of deafness and a violent “bursting” pain in the left ear. The pain was much increased by chewing, and especially during the act of swallowing. Dizziness was a prominent symptom, and locomotion was difficult, owing to an irresistible impulse to lean toward the right side.*

* I can not believe that in this case there was any injury of the base of the brain, nor Meniere's disease. I have seen other cases of ear trouble where the same symptoms, dizziness and inability to walk in a straight line, were present, without any cerebral or spinal lesion manifest. In one case was this particularly manifest. The patient, a gentleman aged thirty-three years, troubled with chronic aural catarrh affecting the left ear for a period of years, was unable to walk on the sidewalk without leaning to the left side, and would come into contact with fences and lamp posts unless constant caution was

When I saw the sufferer two days after the injury, the left shoulder and side of the face were somewhat contused, but the auricle was only slightly bruised, the skin being scraped off in one or two places.

The external meatus was apparently free from congestion to within about one-fourth of an inch of the membrana tympani. From this point it was reddened and the whole membrane was the color of blood. The triangular spot of light was absent, and the umbo was bulged outwards by what I considered to be a collection of blood in the cavity of the tympanum. The processus brevis mallei was very prominent, and a depression was seen in the course of the handle of the malleus at about the upper third of the distance between the processus brevis and the spatula-shaped end of the membrane.

Inflating the ear caused an increase of pain, and according to the patient, a loud noise like the crack of a pistol. Immediately after inflation there appeared at the depressed point above-mentioned a roundish elevation like a bubble, which disappeared in a few moments, and was evidently a bubble of air between the layers of the membrane, obtaining access through a rupture in the mucous membrane.

My diagnosis was a fracture of the handle of the malleus, possibly by concussion; certainly not by any direct violence to the membrane. The treatment was intended simply to give the parts rest. A wad of cotton moistened in collodion was inserted into the meatus, and a layer of collodion painted on the outer surface in order to exclude the air and prevent as much as possible

exercised. About three months since his right ear became affected in a similar manner, and immediately he changed his walk, being more liable to strike with his right side any objects he might be passing. Still another peculiarity in this case was an inability to distinguish distant objects while walking, and he was unable to recognize even his most intimate acquaintances without coming to a standstill. Since he has been under treatment his right ear has almost recovered its normal hearing power, and he now again leans to his left side.

motion of the membrane. Milk and soups were ordered as diet, and opiates given to alleviate pain. Quietude was enjoined, and the patient requested to report progress.

Three weeks afterwards the wad of cotton was easily removed, having already become detached, and the ends of the broken bone were seen to be united, a slight bulging of the membrane being evident at the point of union. The membrane was still slightly congested and abnormally concave.

Hearing power tested with the watch, right ear, three feet; left ear, sixteen inches. Catheterization caused air to enter freely into the tympanum, but did not increase the hearing distance, and the patient was discharged.

REMOVAL OF AN AURAL POLYPUS FOLLOWED BY A CROP OF CARBUNCLES ON THE ARM.—A printer, while engaged in setting the type in the article on Malignant Disease of the Ear, which appeared several months ago, became alarmed and applied for relief from an aural polypus which had existed in his left ear for about ten years. The growth had been removed some years ago, but at once returned.

When I saw the case there was a mulberry polypus in the left meatus, which entirely filled the canal, and was attached, as I afterwards found, to the anterior wall at the point of junction with the membrane. There was a constant flow of stinking yellow pus, and also occasional bleedings from the polypus. Just behind and below the auricle was a swelling about the size of a pigeon's egg which, when opened, discharged a quantity of ichorous matter. The man thought his case similar to the one described in the article alluded to (in fact it did present several points of similarity) and he expressed himself as having "malignant on the brain."

The growth was removed by means of the wire snare

and lever-ring forceps, and the pedicle cauterized with chromic acid, one of the best means of preventing a recurrence.

The polypus was entirely destroyed, the discharge ceased, the swelling behind the auricle disappeared, and the hearing power tested with the watch was increased, from not being heard at all, to one inch from the auricle.

Hardly had the discharge ceased than the patient began complaining of headache, and in a couple of days a crop of carbuncles made their appearance on the left arm. These carbuncles, in all about thirty on the left arm, and two on the right arm, of course disabled the patient for work for a few weeks, and he was placed upon tonics and iodide of potassium. Now he is as well as ever and there has been no reappearance of the polypus or of the discharge.

DIAGNOSIS OF A CASE OF BRIGHT'S DISEASE WITH THE OPHTHALMOSCOPE.—A woman aged 39, pale and anæmic, had been treated by her family physician for several months, the diagnosis being dyspepsia and some cardiac lesion not definitely known. Vision had gradually failed until she was able to distinguish large objects only, and in a moderate light—bright light proving too dazzling, and feeble light insufficient. Quantitative perception of light varied occasionally, being better at times, and worse at others; but no change in qualitative perception could be distinguished except as above stated, owing to the amount of light. Power of accommodation was lost. Pupils dilated and sluggish. Examination with the ophthalmoscope revealed the existence of retinitis albuminurica. The optic papilla was obscured and surrounded by a yellowish patch, and the region of the macula lutea was dotted with white glistening patches of exudation which assumed almost a crystalline appearance. Both

eyes were similarly affected. The diagnosis was Bright's disease of the kidneys, and an unfavorable prognosis was given. The patient died about three months after the examination, of dropsy and uræmic poisoning.

Although the ophthalmoscope is not an infallible means of diagnosis in Bright's disease, yet it has been estimated that about one-fourth of the victims of the malady are afflicted with retinitis albuminurica. Graefe once made the error of pronouncing a case one of Bright's disease when the post mortem revealed the presence of a tumor in the brain, and no kidney lesion whatever.

Gleanings from Foreign Journals.

BY GUIDO BELL, M. D., INDIANAPOLIS.

On the diagnose of beginning *carcinoma uteri*, Prof. Spiegelberry says: If no ulceration can be found, a discrimination between carcinoma and induration is very difficult, even impossible. A difference of hardness and resistance is not always perceptible, but a *more or less immovable mucous membrane* over the indurated parts, and a *rigidity of the neck* of the womb, entirely *unchanged* by *spongetent* are infallible symptoms of beginning carcinoma. Carcinoma originates from the Rete Malpighi after Waldeyer, very seldom from the glands of the neck [areolar cancer]. Excrescences are formed by epithelium with or without papilis growing up exuberantly; infiltration begins the same way, but takes the opposite direction to the deeper layers. Exulceration, a reduction of the *infiltrated* parts, can sometimes be induced by sponge tent, and, considering the hopelessness of an operation for true cancer, its trial is commendable. —*Archiv f. Gynaek.*

The influence of obstetrical operations, as to the number of still-born babies, has been examined by several

statistics. The more operations the more deaths, due to the cases, not to operating. Some countries show less deaths and less operations. The favorable influence of artificial interfering appears small.—*Ibid.*

Prof. Hildebrant mentions a case of spasm of the *levator ani* during sexual intercourse, and proves that *Sims'* hypothetical *sphincter vaginae superior* is nothing else than this muscle.—*Ibid.*

Tetanus of the womb, when the birth beginning, is not an active contraction. All authors agree in this. The fœtus is simple retained, not laced around. *Dr. Lahs* says: The water flows away by abdominal pressure, the womb lays then around the fœtus and remains so, whether the labor commences or not. The unequal pressure to the uterine walls is the cause of unequal distribution of blood and of inflammation.—*Ibid.*

Prof. Binz recounts the noxious effects of quinine:

1. On the nervous system and the heart; weak convalescents and persons with organic heart diseases should not take large doses.

2. On hearing, it can be lost for a life time.

3. On the speech the same.

4. On the sight the same.

5. Bleeding in the lungs and eruptions on the skin can ensue.

6. The intestines are undoubtedly the most irritated by large doses. Their secretion is alkaline during fever; quinine should be given a little acidulated.

7. Bright's disease and inflammation of the bladder can be caused.

Dr. Zeroni says in regard to this: It is striking that convalescence after quinine treatment in typhoid fever is so much protracted, he refers to a *post mortem section*, where the spleen was of 200 grammes weight, 100 per cent. lighter than an ordinary typhoid spleen, and some lighter than in healthy state.—*Deutsche Klinik.*

In regard to bad events by the sponge tent *v. Gruenewald* says, inflammation of the womb and rigidity thereof are contraindications. *Kuneke* holds up *Sims'* rule, to leave it in not longer than 24 hours; *Winkel* recommends *gentiana* or *laminaria* for doubtful cases; *Henning* applies it with carbolic acid.—*Memorab.*

Dr. Lorey of Christ's hospital, at Frankfort, gives his experience with hydrate of chloral in whooping-cough. He used the following solution: Hydrate of chloral 5.0, water 150.0, orange-peel syrup 15.0, and gave a teaspoonful to half a tablespoonful in the morning and one or two at bed-time, so that 0.25 to 1 gramme was taken daily.

1. The remedy was well borne.

2. The attacks were diminished in frequency, about 12 in 24 hours.

3. The convulsive stage was very short; perhaps the epidemic was mild.—*Deutsche Klinik.*

Hydrate of chloral was successfully used in spasms of the wind-pipe by *Dr. Behn*. The prescription was hydrate chloral 0.53, syrup 20.03, a teaspoonful every four hours.—*Iahrbucher f. Kinderkeil.*

Dr. Heilberg publishes 300 cases of transplantation of skin: the largest piece was of the size of three centimeter; he recommends the size of one centimeter and several pieces, the operation to be repeated every three days, the time when they commence to form adhesions.—*Berlin Klin. Wochensch.*

In a case of lymphoma, where iodine and quinine have failed, *Fowler's* solution in ordinary doses was successful in about four weeks.—*Wiener med. Wochensch.*

On *Niemeyer's* thirst-cure of pleuritic exudation, *Dr. Pinser* publishes favorable results. Purulent exudation can not be absorbed.—*Allgem militär. Ztg.*

Pirogoff publishes his report on the last German-French

war; he has visited 70 military hospitals. He says the international help did not correspond to the theoretical object; the advantage was only on the side of the conqueror. The physicians of both sides should consult; the military administration should be in connection with the help associations, even before the war, and the latter should have a neutral independency. The physicians should not be in the battle; their only duty is to carry the wounded from the battle-field, as easily as possible, to a constant place of rest, where they can be sorted. He gives the greatest credit to the administration in the American war, because private help could be active.

Ice treatment was nearly abandoned, wounds were not enlarged, but treated by carbolic acid. *P.* is for *drainage* and irrigation; he recommends marine lint and oakum. Primary amputations were seldom performed, in consequence of statistical arguments, of appliances of immovable bandages and of conservative principles now prevailing. He saw 30 gun-shot-fractures of the thigh-bone entirely healed up, and 40 gun-shot-wounds of the knee-joint cured, some movable, two with the bullet in.

The immovable bandage, the inclined plane and the permanent extension were in general use. *P.* highly recommends the *plaster of paris* bandage combined with wire pans. The inclined plane and *Simon's* bed are not important. Ex-sections have not been successful. The surgeons were unlucky in tying up large arteries, that operation was performed sometimes too late, at others too near the wound. *P.* does not think much of digital compression on the battle-field, there were no better results from amputation than in other wars. *P.* is against this primary amputation corresponding to his conservative principles.

Pyemia ensued especially after bleeding; gangrene was diphtheritic; erysipelas was contagious in some

hospitals and successfully treated by camphor; typhoid fever had no unusually bad character, but dysentery was fatal around Metz.—*Ibid.*

Clinics.

REPORT OF A CASE OF LITHOTOMY.—Dr. Bigelow, of this city, reports the following:

In January of this year I was consulted by a boy fourteen years old, who complained of all the symptoms of stone in his bladder. At the time I examined him (on account of the size of the sound) I was unable to discover any stone, and prescribed him buchu leaves and bicarb. soda. He applied again in two months, at which time I made a more careful examination, and found, as well as I could judge with an appropriate sound, a stone about the size of a quail's egg in his bladder, and sent him home to await his consent and pleasure to have it removed. He is a lad of moderately good flesh; has been suffering with stone for three and a half years. There is no history of any family predisposition to stone. On the 3d of April he came to my office asking me to remove it. Being a farmer's son, living several miles in the country, I advised him to get a place in the city, which he did, and on the 5th I proceeded to operate, by the lateral method, with the assistance of Drs. Comingor, Todd and Dunlap, in the presence of Drs. Newcomer, Parvin, Featherston and others. The operation lasted four minutes. A calculus was removed weighing three drachms and two scruples. No complication followed, being well on the 18th. No incontinence of urine or other trouble.

SOMETIME in the latter part of March Dr. Parvin performed ovariectomy on a patient, resident of this city, and we believe with entire success, no untoward symptom supervening. If our memory serves us right, this is the

first successful operation of the kind we can record, performed in this precinct.

DR. J. A. COMINGOR reports the following :

Wm. White, in the employ of the C., C., C. & I. Railway Company, resides at Lawrence, Marion county, Ind. On the 10th of February, 1872, his right leg was caught between the roofs of two cars, just below the knee, fracturing the tibia just below the tubercle, lacerating the popliteal vessels and nerves. On the 10th day after injury, amputated through the knee, sawing the bone off at the epiphysis, removing the condyles and the patella. Method—Anterior rectangular flap, vessels were secured, and the flesh turned back and secured by bandage. No sutures used. Recovered.

EPITHELIOMA.—Lower lip, involving both cheeks, chin, tissues and inferior maxillary; male 28 years of age; two years standing. March 18th excised tumor and diseased structures.

EXTENSIVE hæmorrhoids surrounding the rectum; very vascular. Subject, male, 30 years of age. Operated by the ligature. Effectually cured.

A CASE of internal and external hæmorrhoids; young man, 28 years of age; had piles from childhood; suffered greatly; general health impaired. Ligated the internal and excised the external. Relief complete.

Boy aged 9 years, with congenital cystic tumor in the right triangle of the neck. Large, lobulated, multilocular. April 22d, 1872. Extirpated the sac.

TALIPUS VARUS, single, left foot; boy aged one year. Tendo achilles two inches too short. April 23, 1872, divided this tendon subcutaneously. External wound healed by the 27th. Applied extension shoe.

Editorial.

THE LEGITIMATE BUT ABUSED PLEA OF INSANITY AGAIN.—In the March number of the Cincinnati *Lancet* we find a discussion upon the subject of insanity occasioned by a paper read by Dr. Carson with reference to the case of one Blackburn, indicted for killing his wife.

As we know nothing about the case itself we can not understand its merits, and shall confine our remarks to the expressed views of the members of the academy, taking for granted that if they are worth anything, they are true expressions of various analyses of testimony and facts involved. Drs. Graham and Carson contended that, connecting the family history with predisposition to hereditary insanity, that the prisoner was not sane of mind, and therefore not responsible for his acts. As to his "mental condition," for which he used tests, they say "he had defective vision and hearing in left side, with defective sensibility upon right side, and this was conclusive evidence that the man's mental faculties were impaired." "Did not think that he feigned," because "when his family was alluded to he wept, and if he was feigning he could not weep."

Certainly, if the report of Dr. Graham's remarks are correct, he must be entirely ignorant of what are the tests of mental derangements.

It is palpable to every one that defective vision, hearing or sensibility are not *true* test. Such^a condition may indeed be found associated with deranged mental powers, but they do not, in a large per cent. of cases, amount to anything, else we should have a far greater number with "unsoundness of mind."

As to the "flow of tears" not being produced when a person is feigning, grief, etc., no one need be told that this is false. Some can not, it is true, weep unless under

real emotions. But this proves nothing, for some can not weep at all, even though racked with torture or full of grief. Again we each can call to mind those whose tears will flow almost at will. Then why should sensible men ignore these facts for the sake of sustaining a theory, and throw the profession open to censure.

As to the "family history with a predisposition to hereditary insanity." Here indeed the Doctor has a firmer foothold and a more plausible doctrine. Such a history ought to excite suspicion in all cases, and cause us to scrutinize the circumstances of the case, condition, and manifestation of the patient, etc., with the greatest possible care; but when this is said, *all* is said, for this predisposition of itself is *not* insanity, nor yet "unsoundness of mind;" that they may become so more readily because of such condition is admitted, but they are either unsound and insane, or they are not. If they *are* insane, even partially (and we certainly recognize such a condition) this can be ascertained by careful examination. If *not* insane, this is equally ascertainable. It may be difficult. He may be upon the border lines between the sane and insane state, but his actual mental status is separate from the predisposition, for very many whom we know, possessing this "predisposed" tendency are as sound and sane upon *all*, and often more apt upon *many* points than is his neighbor who traces his lineage back without meeting with any deviation of mental faculty from healthy standard.

In the above debate Drs. Quin and Stanton take the same (untenantable) grounds as the above upon the points mentioned. Drs. Wright and Reany maintain the true doctrine as to accountability, *that although insane partially, accountability was not therefore necessarily destroyed*. This was held by authorities many years ago, but during a short period past it has been nearly "snowed under" through the efforts made by counsel to clear their crimi-

nal clients. Upon this point we have expressed our views before, and need not now repeat.*

Dr. Richardson touches upon the true view: "We must look to his status previous to the committing of the act," and that "when it is recognized that a man can not restrain himself, and yet know right from wrong, there will be no safety to society." In expressing the sentiment, however, that there "should be no such thing as moral insanity," we think he goes entirely too far, for although it may be held to be hair-splitting, we believe that a condition truly termed moral insanity does exist. Its causation and manifestations may be linked or otherwise with a certain perception of "right and wrong," but as regards the "right and wrong" test, we think that these terms have been, and are often confounded with a condition where the individual acknowledges his views or acts to be "good or evil" in the abstract, and unlawful in that particular case, but still regards them *right* under the circumstances, and in judging whether he considers them *aright* or not, we must carefully distinguish between what the unbiased reason confirms as right, and that which is often termed so. For instance, all right reason teaches, and it is admitted that it is not right to destroy in a spirit of revenge for injury to self or friends—the *right* is to forgive and pass by—but custom, the prompting of our natures, etc., often leads us to the loose assertion that such and such an act—as the injury of another for seduction of a sister, etc., was *right*—and indeed it appears to be upon this principle that juries decide, and even medical testimony is often based. The circumstances make it right, we say, and yet we know it to be contrary to the treating of all morals and precepts of all philosophy—our consciences indeed assert the contrary. The right, expressed in the latter, is often confounded with the rigid right of the former. This should not be. In short, a man

* See November number of Indiana Journal of Medicine.

may be insane, knowing "good from evil;" knowing whether it be lawful or not, and knowing that the truly moral right does not exist to sustain his act in the abstract, but believing through the influence of hallucination, false notions, etc., that circumstances have changed the rule as to abstract, and made it absolutely and rigidly right in this case, he may hear the voice of God commanding; he may imagine his acts to be those of self defense, etc. But he will *never, if insane*, base his justification upon the loose views of right, such as paying off a debt, wiping out a stain, etc., at least—and this we admit may be the case, his control of mental powers and emotions are so weakened, that having these latter views he does not restrain himself. He is, and ought to be held in law as responsible—partially, perhaps, but still amenable to *some* degree of punishment as well as constant restraint. To turn such a man loose is to virtually sanction murder and all crimes. There is no mercy in this, or justice to society. It is a wrong born of false views or base notions, fed and kept alive by that species of passion that rushes on blindly without reason to guide, until the culminating point is reached, and a reaction sets in that sweeps before it the valuable as well as the worthless. It is this rash and destructive surge we should endeavor to prevent.

Since writing the above we notice an editorial in the Cincinnati *Medical News* controverting the position taken by Drs. Richardson and Quin, as to the non-reliability of hereditary predisposition being at all times indicative of insanity of acts, and as to the indicative value of defective hearing, sight, or even partial paralysis. Our own views upon this subject have already been expressed, and we would call the attention of the editor of the *News* (who we believe is a Psychologist of reputation) to the following view of Dr. Forbes Winslow, in which he holds hereditary predisposition as only corroborative evidence:

"Without questioning the existence of what is under-

stood by the term 'moral insanity,' I do not think, judging from the facts elicited at the trial, that Miss Edmunds suffered from this type of mental disease. She undoubtedly inherited to a remarkable degree an insane taint, but would it not be dangerous to the best interests of society, and very damaging to the interests of medical science, if the existence of an hereditary predisposition to insanity could *per se* exculpate the criminal from the legal consequences of his violation of the law? In all cases of suspected or alleged insanity allied to crime, the fact of the accused person having descended from an insane stock is valuable corroborative evidence as to his mental condition, and becomes of value when associated with other indications of disordered intellect."

OUR friend, Rob. Bartholow, M. D., of Cincinnati, objects to some points in his review of the Transactions of the State Society of Indiana, appearing in our March number. 1st. That his name should appear attached. 2d. That a note should be added by the editor. We take this opportunity to say (as we said to the Doctor personally) that we added his name simply because he was the author. The M. D. was omitted by mistake. This latter might have amounted to something in many cases, but not in the present, for any physician knows who Dr. Bartholow is; but still we regret the omission; "mistakes will happen," etc.

As to the note attached, we claim the right to add a note to any communication, explanatory or critical. This is a custom with journalists, and custom makes it allowable without offense to the authors. Of course, nothing personally offensive should be added, nor did we so imply, and innocently dissented to certain ideas expressed. Since we found the Doctor was not pleased with it, we express our regret. As we do not wish to offend any one, and while we still think it right, it being a matter of no moment, we hope this explanation

will be received in this case so that the principle shall remain unaffected.

ANOTHER journalistic year has commenced. Two years of hard work, of money spent and time gone to establish in its present form the INDIANA JOURNAL OF MEDICINE. We say not with what success the work has progressed. We entered upon the duties with hesitation, and determined to give it a fair trial. We do not feel discouraged. We have watched the various enterprises in the literary field too closely to permit slow growth, sparsity of contributions, or a want even of prompt paying subscribers to cause us to tremble. We expected it, and would have been agreeably disappointed, had we not met, in its various phases, the disappointments journals are heir to. We would ask, however, that our friends who have stood by us in giving us matter for publication, will still favor us thus. We regret that those near home, at our very door, are so slack in this respect. We hope, too, that subscribers will remember that they will be responsible for failures if they do not *pay up*. We think every physician in the state ought to take the JOURNAL, and if it is not good, *make* it so; but we *know* those who do take it ought to pay respect to the bill they will find enclosed.—EDITOR.

WE had some hope that the Indianapolis Academy of Medicine would see their interest and duty in the true light and furnish us with abstracts of papers read and discussions held, for publication. We were mistaken. The Secretary contends that the duties of reporting are too much of a task, and no member has time (!) to attend to it, and as to paying any one for service in that line, it is not thought of. All other societies, we believe, furnish some journal with their proceedings, not expecting the editors to steal them. We hope the various associations throughout the State will continue to send us matter, and not be deterred by the ex-

ample now set by the Academy of Medicine held at the Capital of the State.

WE have received the announcement of Toner's Medical Register and Directory of the United States, issued by S. W. Butler, M. D., Philadelphia.

This is to comprise the name and post office address, and indicate the theory of practice of physicians, names and locations of colleges, hospitals, asylums, institutes, associations, etc., in the states and territories.

It is to be sold by subscription only. Certainly, it is something that will be of great value to every physician, and indeed to the public generally. There are over 70,000 physicians in the United States, and yet from what source can any one outside of the subscription books of journals, etc., find the location, etc., of one hundred? We hope every one who receives an announcement will promptly respond. It is in this way only that we can encourage science and labor.

AMERICAN MEDICAL ASSOCIATION.—The Twenty-third Annual Session of this Association will be held at Philadelphia in Horticultural Hall, Broad street above Spruce, on Tuesday, May 7, 1872, at 11 A. M. Arrangements have been made with all the principal hotels and boarding houses in the city for the accommodation of those attending, at prices varying from \$1.50 to \$4.00 per day. Also with the different railroads throughout the country. All who desire to avail themselves of the reduced rates must send to the Secretary their full names, and the names of *all* the railroads over which they must travel in coming to the session, with stamp for postage.

Address, WM. B. ATKINSON, M. D.

Permanent Secretary, 1,400 Pine street, South-west cor. Broad, Philadelphia.

THE Indiana State Medical Society will meet in this city May 21st, 22d and 23d, in annual session. A large meeting is expected.

The meeting will be held in the lecture rooms of the Indiana Medical College.

The following is the railroad arrangement for delegates and permanent members :

Indianapolis, Peru and Chicago, Bellefontaine and Indianapolis, Cincinnati and Indianapolis Junction, return free.

The Terre Haute and Indianapolis, Indianapolis and St. Louis, Cincinnati and Indianapolis, and Indianapolis and Lafayette, return for one-fifth fare.

The Pittsburgh, Cincinnati and St. Louis, Indianapolis, Bloomington and Western, decline to reduce rates.

WE see that Dr. Joseph Toner, Washington, D. C., has given a fund for the purpose of establishing what is termed the "Toner Lecture," consisting, however, as expressed in the article of agreement, of two papers upon some scientific point connected with medicine, to be produced each year and read in Washington. A certain per cent. of the fund is set apart as a prize for this article. It was accepted by a committee. We wish there were more "prize funds," and that "lectures" proper, as well as papers, were encouraged in all parts of the country.

By the kindness of Wm. H. Thacker, M. D., of Denver, we have received the report of the meeting for the organization of a Territorial Medical Society, held at Denver, Colorado, Tuesday, Sep. 19, 1871. The address of Dr. Buckingham is very *apropos*. We hope our territorial friends that have set such a good example, will not "faint or grow weary."

ON account of the press of professional business, Drs. Wright and Bell have severed their connection with this JOURNAL. We have arranged, however, so that we will not lose their aid in the form of contributions.

REPORT OF AUTOPSIES MADE AT CITY HOSPITAL, INDIANAPOLIS.*

BY THAD. M. STEVENS, M. D., PATHOLOGIST.

1st. John Wolf, age —. Section by Drs. Marsee and Tomlinson. Abdomen and thorax examined; great emaciation; plura of both sides adherent to parietes of thorax over whole surface.

Lungs—Caseous deposits in both; more numerous in apex.

Heart—Flabby, otherwise normal, except a portion of wall of right ventricle near pulmonary opening; small amount of fatty degeneration.

Larynx—Mucous surface destroyed by ulceration; vocal cords obliterated; cartilage exposed; pigmentary deposit in soft parts at the cornute of os hyoid.

Symptoms—Loss of voice, expectoration of pus; no positive signs of deposit in the lungs.

2d. Milton Lucas. Section by Drs. Marsee and Tomlinson; in hospital four weeks; diagnosis phthisis.

External appearance—Right groin; ulcer one inch square.

Thorax and abdomen examined—Right plura adherent at upper surface, also left, the whole surface.

Heart—Pericardium full of fluid; left lung, two large cavities; right, filled with tubercles; caseous deposit in mesentery.

3d. Michael Gorman. Section by Drs. Marsee and Tomlinson.

External appearance—Trachea forced to the right.

Thorax and abdomen examined—Plura adherent to sternum; stomach and bowels full of blood; heart natural; lungs normal; tumor found adherent to upper

* The attending physicians during the year these autopsies were performed were Drs. Newcomer, Bigelow, Comingor, Oliver, Harvey, Waterman, Stevens, and Fletcher.

one-quarter of sternum. Upon examination, found to be an aneurism of the arch of aorta about three inches in length and five and a half inches in width; ulceration opening into the esophagus caries of the body of the 4th vertebra where the tumor pressed, the anterior portion of tumor being formed by coagulation, in bulk the size of a goose egg; the orifices of the innominate was found in the walls of the aneurismal cavity.

Symptoms—Impress strong over upper one-third of sternum, and under right clavicle; hard tumor felt by pressure between the sternum and trachea; no murmur or bruits; pulse upon right side slightly weaker than left. Diagnosis divided between aneurism and enlarged bronchial glands.

J. Sullivan. Section by Drs. Marsee and Tomlinson.

External appearance—Great emaciation; loss of tissue from gangrene extending from one inch in front of anus upwards two inches above pouparts ligament, and from the left inferior spinous process of illium to the pubic arch; the tissue around left side of rectum was destroyed; portion of abdominal muscles dissected up.

Internal appearances—Abdomen examined—Six inches of lower portion of rectum thickened and constricted; mucous membrane ulcerated; bladder contracted, and mucous membrane presented appearances of chronic inflammation; urethra normal; all other parts healthy.

Miscellaneous.

BELLEVUE HOSPITAL.—The medical staff and medical students of this Institution have for some time past made themselves quite notorious, by making it so that the women medical students of this city who, under the laws of this State, have guaranteed to

them every privilege enjoyed by other medical students, can not attend without being insulted. We give a little circumstance which transpired in that Institution a few days since. A case was presented in the Clinical Lecture-room for surgical treatment.

Says the professor: "Gentlemen, you will see that this is a case of cancer of the penis, and requires amputation." Taking hold of the organ and stretching it to its greatest capacity, he said: "Gentlemen, this is an old penis (the patient being an old man). I would rather amputate a younger one, as then it would prevent more mischief, while the old one could not do much harm." Says he: "No use of any more talk, here goes, one, two, three, there is your penis," applying the knife with the word, and throwing the organ some distance upon the floor. Now has not the time arrived when an American woman in our American Medical Institutions should be protected from such insults by the men in charge of such Institutions?

Similar outrages are committed to such extent that not a single woman can attend there without being insulted.

The Legislature of this State should not adjourn until some wholesome and special laws are enacted with special reference to this hospital. Every Representative should blush at such insults and outraged feelings. Here is a set of men who reap a lucrative income from this Institution, and yet they are allowed to thus treat our own women. Separate the Faculty of the Bellevue Hospital from this Hospital, and this Medical College would soon find its level or pass away, for its only existence depends upon its connection with the hospital.

Every man connected with the medical staff of that hospital who has been guilty of such indecencies and ungentlemanly conduct should be removed at once, and their places filled by gentlemen who have not forgotten

that their mothers, wives, and sisters are women.—*American Eclectic Medical Review*.

[NOTE.—We reproduce this for what it is worth. We do not approve of vulgarism under any circumstances, but a little levity will be indulged in on such occasions, and if women will become acquainted with the penis, there are only two ways of doing it, viz.: by sight or touch.

MEDICAL JURISPRUDENCE.—“There is one matter, however, to which the Faculty of the Harvard Medical College can hardly have given the attention which its importance deserves. We mean the subject of instruction in Medical Jurisprudence. Dr. Cheever devotes to it, in his recapitulation, a very few words, but these so distinctly state the intended policy of the Faculty, that we give them entire.

“Medical Jurisprudence,” say the Faculty, “is a subdivision of our art about which we should know something, as those learn to their cost who are called into court to testify. Most colleges give a short course on it. It is naturally divisible into two parts: *First*, the rules of expert testimony and the practice of courts of law, which would be best taught by lectures from a jurist; and, *Second*, expert testimony in toxicology, in surgery, in anatomy, in psychology, and in obstetrics, which would be better learned in connection with each of those departments.*

With reference to the above argument, it has a certain speciousness that at first sight might cause it to be accepted. Judged by the usual standard of instruction in Medical Jurisprudence, certainly as it has hitherto been taught in the Boston School, there can be no doubt that it has practically amounted to little or nothing. Here in Boston the course in this department has been merely in name, one of the several cheats upon which

*Boston Medical and Surgical Journal, October 5, 1871, p. 216.

much of the old "sham" respectability of the School used to rest. Medical Jurisprudence was merely an appendage to the midwifery chair; and not merely this, but it had to share its little fraction of attention with other important departments, which, though each deserving of special attention at the hands of teachers who are really masters in their art, still remain, we trust not intentionally, in undeserved obscurity and neglect.

"One great cause of the ill name that the Faculty seem inclined to attach to Medical Jurisprudence as a separate branch of study, is undoubtedly owing to the fact that those who have attempted to teach it have usually been lawyers who knew nothing whatsoever of physic, or doctors who knew as little of law. And yet it is just precisely this same method, save that its folly would be intensified by subjecting the student to a pair of one-sided and therefore partially ignorant teachers instead of, as now, to a single one, that the Faculty wish to be permitted again to establish."—*Journal of the Gynæcological Society.*

THE SOCIAL EVIL—DR. HOLLAND'S BILL.—Many persons are anxious lest the bill introduced in the Senate of California by Mr. Wand, should be slipped through by strategy, in defiance of public sentiment as far as expressed. That there are individuals who would accomplish that purpose if it were possible, we do not doubt. The passage of the law would greatly enhance the rental value of a certain class of property in San Francisco; and it would also enable the proprietors of certain houses greatly to increase their revenue by monopolizing trade. Hence, golden arguments are suspected; and the suspicion is justifiable, in view of the pertinacity exhibited in pushing the measure. That some of its advocates have honest motives we do not doubt for a moment. Alarmed by the great extent of licentiousness and disease, some individuals thoughtlessly

clutch at any proposed remedy. Others again have had a European experience and have fallen in love with European institutions. Take that class of Europeans and of American travelers in Europe who know every thing, and a few excellent Americans who know nothing and go by impulse, and unmarried *miserables*, and married libertines, and you have the head and front of the advocacy of the social evil license. Of the great mass of citizens who acknowledge the obligations of morality and religion, nine-tenths are hostile. Among females, the friends of license are among the licentious; whilst virtuous women, almost without exception, shrink from it as by a sacred instinct.

The attempt to obtain legal sanction for gambling is of kindred birth. Both movements belong to the effete and vicious code of the old world. Even in the principal countries of Europe, gambling is now no longer licensed. Whilst the law makers of Europe are abolishing their "hells" as too corrupting for their standard of morals, the attempt is made to transplant the curse to the soil of our young republic. It is not likely such a retrograde movement in civilization would have been made in California but for the precedent which sought license for the other vice. If licensed gambling houses be entitled to the name of "hells," are licensed houses of prostitution less deserving of the appellation? Truly both are *hells*; and we devoutly pray that the Statute Book of California may never be polluted with a legalization of either.—*Pacific Medical and Surgical Journal*.

NOTE.—These sentiments we fully endorse. See article in former number of Journal—Ed.

ARSENIC IN DYSPEPSIA.—Dr. J. C. Thorowgood, in the *Practitioner*, speaks highly of the action of arsenic in many diseases of the stomach. He has found that one-drop doses of Fowler's solution in half an ounce of infusion of Columba had the effect, in a case he treated, of allaying the pain, stopping the vomiting of food, and

enabling the patient to eat and digest small quantities of mutton. He states that the small irritable tongue, with projecting papillæ and yellow or gray fur, indicate arsenic. The more purely local the gastric symptoms, the better is the chance of arsenic doing good. Where there is much general exhaustion of the system, with disordered urine or hepatic congestion, it does not promise much.—*New York Medical Record*.

THE SELLING OF DIPLOMAS.—The following letter is published in the *New York Medical Record* for March:

SIR: Duty to myself, not favor to persons or colleges,—for I never knowingly do favors where crime may possibly be abetted thereby—renders it requisite to say, that on further investigation, I find there is no evidence within my reach which will justify the following paragraph of my letter published in the *Record* of the 15th March inst. as regards the College alluded to:

“Besides such outrageous acts, it is credibly stated that this same college advocates the propriety, and follows the practice, of selling their diplomas to persons living in distant parts of the State, on the simple statement of the person seeking it, without any presentation of certificate or credentials.”

I had either misapprehended the statements alluded to, or they incorrectly represented the only written evidence I have yet seen upon this matter of the practice of the said college, of giving diplomas without examination.

So far as the evidence before me goes, the college offers to examine any graduate of a medical college, and, if satisfactory, to give him a diploma for \$35.

It also offers to receive the diploma by mail, or indeed any certificate of graduation, and, excusing the examination, issue a diploma for \$175, that is, charging \$140 more when they do not examine, than when they do examine. Respectfully, STEPHEN ROGERS.

[And is this all? Although it is not right, still 'tis not so heinous as we thought.]—ED.

THE RED BLOOD-CORPUSCLES.—Mr. E. Ray Lankester presents, in the *Quarterly Journal of Microscopical Science*, an interesting contribution to our knowledge of the physical structure of the red blood-corpuscle and the action of gases and vapors upon it.

The red blood-corpuscle has no outer coat distinct from its contents, and having a pronounced inner limitation, none being visible under the highest powers of the microscope (what might be mistaken under low powers for such proving under high powers to be an illusion of refraction), and the corpuscle, torn or cut by drawing a needle across the slide, suffering no escape of viscid material from their interior, but furnishing portions which by the collapse of their edges assume a rounded form; yet their service must be differentiated into a film or pellicle having no definite inner boundary, and similar to the pellicle which forms on a cooling mass of jelly, since they become wrinkled when subjected to oblique pressure, and recover their form and outline again with great elasticity and precision.

The stroma of which the viscid mass mainly consists appears homogeneous in the mammalia, but contains a nucleus in the other vertebrata. This nucleus, though undetected by Savory, seems to exist in perfectly fresh corpuscles, and has been detected in blood while circulating in the vessels of the frog. It is somewhat indistinct, though a temporary delimitation may be caused by certain physiological conditions of the animal, and after removal from the circulation it becomes sharply and permanently defined.

The usually described forms characteristic of certain classes of animals, are not believed to be the only normal forms. The blood of the frog seems to vary at different seasons of the year, and the ordinary biconcave discs of human blood may be more or less replaced, in fresh and perfectly healthy blood, by the "thorn-

apple" and the "single" and "double watch-glass forms."

The macula discovered by Dr. Roberts, of Manchester, in the blood of all vertebrata are strangely ignored by most of the recent authorities, though published many years ago. They are fully verified by the author's researches. A part of the matter composing the corpuscle segregates to form spots, usually one in man but often three or four in the frog, which are ordinarily imperceptible, but which are deeply stained by nitrate of rosanilin, and form sharp little pullulations under the influence of tannin. Whether the development of those macula is *post mortem* or not seems to be undetermined.

That the corpuscles are not in the condition simply of a moistened membrane is shown by the very curious observation that they will readily float out of the plasma into a drop of oil. When separated in this manner from the plasma they show a strong tendency to cohere and thus assume hexagonal forms, just as they sometimes do when a thin film of blood is dried upon a slide.

The appearance and disappearance of the granulation of the nucleus, and other effects demonstrated by Stricker to take place when blood, after contact with aqueous vapor, is exposed alternately to carbonic acid and atmospheric air, is proved to be due to the alternate presence and absence of the carbonic acid, and not in any part to the oxygen of the atmosphere, since the air may be replaced in the experiment by hydrogen or other gases.—*Cincinnati Medical News*.

Chemical and Scientific.

PEPSINE.—Emil Scheffer, in an elaborate paper in the *American Journal of Pharmacy*, gives us the results of numerous experiments with reference to the preparation and properties of a pure and reliable pepsine. The

method he employs for separating the digestive principle from the extraneous matters with which it is associated, commends itself by its simplicity, while it affords a product free from all objectionable impurities, and possessing, in an eminent degree, the solvent powers of the natural gastric juice.

According to E. Scheffer, one grain of purified pepsin in four ounces of acidulated water dissolves 500 grs. of coagulated albumen at a temperature of 105° Fah., in six hours. At a temperature of 75° 400 grs. of albumen only are dissolved, after 18 hours. If the amount of pepsine is increased, the time of solution is not proportionately diminished. The pepsin seems, however, to communicate its digestive power to the dissolved albumen (peptone or albumenose), so that, practically, its solvent action is almost unlimited. If, for example, we dissolve 500 grs. of coagulated albumen in four ounces of acidulated water, by the aid of a minimum quantity of pepsin—say one grain—we shall find that on adding an equal volume of acidulated water, we have a digestive fluid quite as energetic as the first. By adding to the peptone solution an equal volume of a saturated salt solution, we shall obtain a copious white precipitate, or coagulum. This precipitate dissolves in water, forming a solution not coagulated by heat, but precipitated by alcohol slowly, and by bichloride of mercury and chloride of sodium. The solution in water has a slight acid reaction, but does not act on coagulated albumen. On adding a few drops of hydrochloric acid, however, it manifests digestive powers similar to pepsin itself. In one experiment, half a grain of pepsin dissolved 240 grs. of coagulated albumen.

Pepsin, as prepared by Mr. Sheffer, contains a small proportion of chloride of sodium. When freed from this, it loses, to a very considerable extent, its solvent powers. The addition, however, of a larger quantity of salt does not seem to promote its activity; on the con-

trary, if the amount is at all considerable (*e. g.* 5 grs. to the oz.) its digestive action is decidedly retarded.

Alcohol, in all proportions, and under all circumstances, diminishes the solvent power of pepsin. If the amount is greater than 20 per cent. of the fluid, the albumen is scarcely at all acted upon, but acquires the peculiar sour odor which characterizes the discharges from a stomach overloaded with beer or wine.

The action of alkalies upon pepsin is peculiar and instructive. A small quantity of carbonate of soda will precipitate pepsin from its solutions unchanged. A larger quantity re-dissolves the precipitate, but destroys or modifies the pepsin, so that it no longer possesses digestive powers. The alkaline solution becomes putrid. It acts on coagulated albumen only after putrefaction sets in, with development of a genuine fæcal odor. The alkaline solution, however, will act on partially digested albumen.

In regard to the stability of pepsin, the experiments of Mr. Scheffer go to show that all watery solutions of pepsin undergo changes which, in a short time, render them inert.—*Detroit Review of Medicine.*

Dr. Hays

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BIBLICAL MEDICINE.

BY G. W. H. KEMPER, M. D., MUNCIE, IND.

(*Concluded.*)

MASTURBATION.—One case is recorded, Gen. xxxviii, 9. Onan spilled his seed upon the ground, “lest that he should give seed to his brother.” Our term *onanism* is supposed to have derived its name from this man. The thing displeased the Lord, and he slew him.

UNKNOWN DISEASES.

ABIMELECH.—This King of Gerar sent and brought Sarah to his harem, and as a punishment his house had become sterile. On restoring her to Abraham, “God healed Abimelech.” Gen. xx, 17.

NABAL.—“But it came to pass in the morning, when the wine had gone out of Nabul, and his wife had told him of these things, that his heart died within him, and he became as a stone. And it came to pass about ten days after, the Lord smote Nabul, that he died.” 1st Sam. xxv, 37, 38. It may have been a case of catalepsy.

DAVID'S CHILD.—“And the Lord struck the child that

Uriah's wife bare unto David, and it was very sick." 2d Sam. xii, 15. It died on the seventh day of its illness.

AMNON.—This was a contemptible wretch, whose lusts engendered a disordered state of health. Josephus says: "His grief so ate up his body, that he grew lean, and his color was changed." He feigned still greater sickness in order to secure the services of Tamar as nurse, and then ravished her, for which deed he was afterwards slain. 2d Sam. xii.

DAVID.—It is evident that David was afflicted with some physical disease, the exact nature of which is unknown. In Ps. xxii, 14, he refers to his physical suffering: "My bones are out of joint." This, and Ps. xxxii, 3, 4, probably refer to pain. He gives expression to the following, in Ps. xxxviii: "There is no soundness in my flesh because of thine anger; neither is there any rest in my bones because of my sin. My wounds stink and are corrupt because of my foolishness. I am troubled; I am bowed down greatly; I go mourning all the day long. For my loins are filled with a loathsome disease: and there is no soundness in my flesh." Barnes (*Commentary on the Psalms*) says that the original Hebrew of verse 7 would be "synonymous with an inflammation of the kidneys." In verse 11 he says, "My lovers and my friends stand aloof from my sore; and my kinsmen stand afar off." In his old days his vital powers became so reduced that artificial heat had to be resorted to, in order to preserve the normal temperature of his body. 1st Kings, i, 1.

AHLJAH.—It is simply stated that he "fell sick," and shortly afterwards died. 1st Kings, xiv.

A CHILD mentioned in 1st Kings, xvii, 17, "fell sick" and was restored by Elijah.

SHUNAMMITE CHILD.—He went out among the reapers and was taken ill while there, exclaiming: "My head, my head!" He was carried to his mother and "sat on

her knees till noon, and then died." 2d Kings, iv, 19, 20. It was restored to life by Elisha.

BEN-HADAD.—In 2d Kings, viii, 7, we read that this King of Syria was sick. Hazael tried the "water cure," by dipping a thick cloth in water and laying it over his face; an event, which it is intimated, shortened Ben-hadad's days, and made Hazael king.

ELISHA "fell sick" and died. 2d Kings, xiii, 14.

JEROBOAM.—The Lord smote this King and he died. 2d Chron. xiii, 20. This is the same king whose arm was once withered.

ASA.—"And Asa in the thirty and ninth year of his reign was diseased in his feet, until his disease was exceeding great." 2d Chron. xvi, 12. I presume it was gout. He died two years afterwards, whether or not of this disease is not stated.

JEHORAM.—"The Lord smote him in his bowels with an incurable disease. And it came to pass, that in the process of time, after the end of two years, his bowels fell out by reason of his sickness: so he died of sore diseases." 2d Chron. xxi, 18, 19. This was, possibly, a case of chronic dysentery, or diarrhœa tubularis.

JOASH.—In 2d Chron. xxiv, 25, it is merely mentioned that he "was in great diseases." He was murdered, while on his sick bed, by his servants.

JOB.—A great many professional and non-professional persons have vainly attempted to diagnose Job's malady. Of course it can not be definitely settled. We only know that Satan smote Job with "sore boils from the sole of his foot unto his crown." Job, ii, 7. His malady is referred to in Job, vii, 5; xix, 20, and xxx, 30. We have in the history of this man, a train of physical and mental sufferings, I think, unequaled by any other save that of our Savior himself.

DANIEL.—No particulars are given except that he

fainted and was sick certain days, from which, however, he recovered. Dan. viii, 27.

JARIUS' DAUGHTER.—Matt. ix, 18. Luke says she was twelve years old, and lay a dying. Matthew informs us that she died before Jesus reached her, but at his omnipotent command she was restored to life.

A WOMAN with an infirmity of eighteen years' standing, is mentioned in Luke, iii, 11. She "was bowed together and could in nowise lift up herself." At the touch of Jesus's hand she was loosed from her infirmity.

LAZARUS (the beggar).—He is mentioned as lying at a rich man's gate, full of sores. He died. Luke, xvi, 20–22.

A MAN with an infirmity of thirty-eight years' standing is recorded in John, v, 5. It was likely a case of paralysis, as he was unable of himself to get into the pool. He was healed by the Savior.

LAZARUS.—"Now a certain man was sick, named Lazarus, of Bethany." John, xi, 1. He died, but was restored to life four days after by Jesus.

DORCAS.—"And it came to pass in those days, that she was sick and died." Acts, ix, 37. Restored to life by Peter.

HEROD.—"And immediately the angel of the Lord smote him, because he gave not God the glory; and he was eaten of worms, and gave up the ghost." Acts, xii, 23. Josephus says of this remarkable case: "But now Herod's distemper greatly increased upon him after a severe manner, and this by God's judgment upon him for his sins: for a fire glowed in him slowly, which did not so much appear to the touch outwardly, as it augmented his pains inwardly; for it brought upon him a vehement appetite to eating, which he could not avoid to supply with one sort of food or other. His entrails were also exulcerated, and the chief violence of his pain

lay on his colon; an aqueous and transparent liquor had also settled itself about his feet, and a like matter afflicted him at the bottom of his belly. Nay, further, his privy-member was putrefied, and produced worms; and when he sat upright he had a difficulty of breathing, which was very loathsome, on account of the stench of his breath and the quickness of its returns; he had also convulsions in all parts of his body, which increased his strength to an insufferable degree."

EPAPHRODITUS.—"He was sick and nigh unto death." Phil. ii, 27.

TROPHIMUS.—Mentioned as sick in 2d Tim. iv, 20.

The sudden deaths of Ananias and Sapphira, are recorded in Acts, v.

In Num. v, 21–31, is the law of jealousies. In regard to verse 22, I extract from Clark's Commentary, on "Thy belly to swell, and thy thigh to rot." "What is meant by these expressions can not be easily explained. As the *thigh*, *feet*, etc., were used among the Hebrews delicately to express the parts which nature conceals, the expression here is probably to be understood in this sense; and the *falling down of the thigh* (which is the literal meaning of *thigh to rot*) here, must mean something similar to *prolapsus uteri*, which might be a natural effect of the preternatural distension of the abdomen."

SURGICAL.

INFLAMMATION.—This term is twice used in the Bible. Lev. xiii, 28, and Deut. xxviii, 22.

ROLLER BANDAGE.—This is once mentioned, in a metaphorical sense. "Son of man, I have broken the arm of Pharaoh King of Egypt; and, lo, it shall not be bound up to be healed, to put a roller to bind it, to make it strong to hold the sword." Ezekiel, xxx, 21.

CIRCUMCISION.—This is, I believe, the first surgical operation ever recorded. It is now 4173 years since it was

instituted or first mentioned in Gen. xvii. It was instituted as a covenant between the Almighty and Abraham—"Every male child among you shall be circumcised." It was directed to be performed on the eighth day after the birth of the child, Lev. xii, 3. Ishmael being thirteen years of age when he was circumcised, his descendants—Arabs—adhere still to that period for performing it. On one occasion it was performed by Moses' wife, Zipporah, on her son with a "sharp stone." Ex. iv, 25. Circumcision was discontinued during the travels of the Israelites through the wilderness. Josh. v, 5. After crossing the river Jordan into the promised land, "The Lord said unto Joshua, Make thee sharp knives, and circumcise again the children of Israel the second time. And Joshua made him sharp knives, and circumcised the children of Israel at the hill of the foreskins." Josh. v, 2, 3.

INJURIES.—In 2d Sam. iv, 4, is given the case of Mephibosheth, who, when five years old, fell from the shoulders of his nurse and was lamed in his feet. The lameness was permanent. 2d Sam. ix, 3, and xix, 26. A second case is that of Ahaziah, who "fell down through a lattice in his upper chamber that was in Samaria, and was sick." 2d Kings, i, 2. According to Josephus he was coming down from the top of his house when he fell. He died from the effects of his injury. A third case is given in Acts, xx, 9. "And there sat in the window a certain young man named Eutychus, being fallen into a deep sleep; and as Paul was long preaching, he sunk down with sleep, and fell down from the third loft, and was taken up dead." He was restored by Paul.

FRACTURES.—In Lev. xxi, 19, "broken footed" and "broken handed" are mentioned. A fracture of the skull is recorded in Jud. ix, 53. Abimelech regarded his injury as fatal, and requested his young man to

thrust him through with a sword, which had the desired effect—death. Eli fell down and broke his neck when he heard of the defeat of Israel and loss of the ark of God. 1st Sam. iv, 18. Fractures were recognized in the days of Job. Job, xxxi, 22. Fractures are also metaphorically referred to in Sam. iii, 4, and Ezekiel, xxx, 21. The legs of the two thieves crucified with Christ, were broken in order to hasten death. John, xix, 32.

WOUNDS.—In Jud. ix, 40, it is stated that many were wounded in a certain engagement. The priests of Baal at one time, in their blind zeal cut themselves “with knives and lancets, till the blood gushed out upon them.” 1st Kings, xviii, 28. In the same book, xx, 37, a man in smiting another wounded him. Ahab was wounded by an arrow in an engagement. To encourage his troops, he remained in his chariot, but his wound continued to bleed, and he died about sunset. 1st Kings, xxii, 34. Josephus says the wound was in his lungs. Joram was wounded in an engagement with the Syrians. 2d Kings, viii, 28. He recovered and lived long enough to receive a more severe and fatal wound at the hands of Jehu, who smote him “between the arms, and the arrow went out at his heart.” 2d Kings, ix, 24. Ahaziah, King of Judah, was wounded by an arrow, and fled to Megiddo, where he shortly afterwards died from the wound. 2d Kings, ix, 27. Josiah, a king, was also wounded by an arrow and died soon afterwards. 2d Chron. xxxv, 23, 24. In Matt. xxvi, 51, it is stated that Peter cut off a servant’s ear with a stroke of his sword. John records the servant’s name as Malchus, and says it was the right ear. Luke says Christ healed the wound. In the parable of the vineyard, Mark, xii, 4, Christ speaks of the servant being wounded with stones in the head. The man who went from Jerusalem down to Jericho, fell among thieves and was wounded.

Luke, x, 30. Seven men were wounded by a man "possessed." Acts, xix, 16.

SERPENT BITES.—At one time when the children of Israel were journeying through the wilderness, they were visited by "fiery serpents," and they bit the people; "and much people of Israel died." Num. xxi, 6. An antidote was prepared by direction of the Lord—a brazen serpent. The person who was bitten was saved by looking on this image. Paul, while upon the island of Malta, was bitten on his hand by a viper. Acts, xxviii, 3. The natives expected to see him suddenly expire, but he was miraculously saved.

AMPUTATIONS.—The person who had his privy member "cut off," was not permitted to enter into the congregation of the Lord. Deut. xxiii, 1. In Judges, i, 6, is the following language: "But Adonibezek fled; and they pursued after him, and caught him, and cut off his thumbs and great toes." From the reading of the next verse, it seems that this king had beforetime tortured seventy other kings [sub-rulers] by the same process. A metaphorical allusion is made in 1st Sam. ii, 31: "Behold the days come, that I will cut off thine arm," etc.

ISSUES OF MEN.—In Lev. xv, this subject is mentioned. From the 2d to the 13th verse it would seem that either gonorrhœa or syphilis is implied. The disease was to be regarded as a constitutional one, for even the saliva of the affected person was to be shunned. Syphilis may or may not have been prevalent at that time. It requires no stretch of faith to believe that venereal diseases may have originated centuries before, as easily as centuries after Christ. The 16th, 17th and 18th verses refer to spermatorrhœa or sexual intercourse.

EUNUCHS.—The first mention of eunuchs is in 2d Kings, ix, 32. They are probably referred to in Deut. xxiii, 1. According to the marginal reading of Gen. xxxvii, 36, the "officer" Potiphar may have been a eu-

nuch, although he was married. His wife's imprudence would strengthen such a conclusion. Castration was held in great detestation by the Jews. Josephus says of eunuchs: "Let such be driven away, as if they had killed their children, since they beforehand have lost what should procure them; for evident it is, that while their soul is become effeminate, they have withal transfused that effeminacy to their body also. In like manner do you treat all that is of a monstrous nature when it is looked on; nor is it lawful to geld men or any other animals." Captives were often subjected to this mutilation. Isaiah informed Hezekiah that his future posterity would be carried captives to Babylon and there made eunuchs. 2d Kings, xx, 18, and Isaiah, xxxix, 7. Daniel and his companions literally fulfilled this prophecy, as they were, doubtless, castrated. Dan. i, 3-18. Eunuchs are mentioned in Jer. xxix, 2, and xxxiii, 7. The following occurs in Matt. xix, 12: "For there are some eunuchs which were so born from their mother's womb." Probably cases of cryptorchis. A celebrated eunuch is spoken of in Acts, viii, 27. Generally both testes and the penis were removed.

DEFORMITIES.—In 2d Sam. xxi, 29, is mentioned "a man of great stature, that had on every hand six fingers, and on every foot six toes, four and twenty in number." Another case is given in Acts iii, 2, of a man who was lame from his mother's womb. The malformation was in his feet and ankle-joint. He was healed by Peter. A third case is recorded in Acts xiv, 8: "And there sat a certain man at Lystra, impotent in his feet, being a cripple from his mother's womb, who never had walked." He was healed by Peter.

EMBALMING.—There is no doubt that this process was understood by the Egyptians, to the greatest perfection. It is only mentioned in the fiftieth chapter of Genesis. From the reading of the third verse, it required forty

days for embalming Jacob. This was near the average, as it required from thirty to seventy days. The Hebrews were not in the habit of embalming their dead. Rollin says: "Many hands were employed in this ceremony. Some drew the brain through the nostrils, by an instrument made for that purpose. Others emptied the bowels and intestines, by cutting a hole in the side with an Ethiopian stone that was as sharp as a razor; after which the cavities were filled with perfumes and various odiferous drugs. As this evacuation, (which was necessarily attended with some dissections,) seemed, in some measure, cruel and inhuman, the persons employed fled as soon as the operation was over, and were pursued with stones, by the spectators."

AFFECTIONS OF THE EYES.—Blindness is first mentioned in Gen. xix, ii. The people surrounding Lot's house were smitten with sudden blindness. A similar occurrence is mentioned in 2d Kings, vi, 18. Leah was tender-eyed. Gen. xxix, 17. Blindness was among the curses for disobedience. Deut. xxviii, 28. The Philistines put out Sampson's eyes. Jud. xvi, 21. The same act of cruelty was perpetrated on King Zedekiah. 2d Kings, xxv, 7, and Jer. xxxix, 7. Mention is made in Matt. ix, 27, of two blind men who were cured by Jesus; and two more cases by the same apostle, xx, 30. Another case is given in Mark, viii, 22. In the ix chap. of John, is the remarkable case of a man who was born blind and remained so until he was of age, when he was healed by the Savior. Paul was temporarily blind. Acts, ix, 9. A similar case is narrated in Acts, xiii, 11. Blindness is a common disease at the present day in the East. Jaffa is said to contain five hundred blind, out of a population of five thousand, at most. It is a common saying that in Ludd, "every man is either blind or has but one eye."

BLIND AND DUMB.—One case is mentioned in Matt. xii, 22. Healed by the Savior.

DUMBNESS.—A case in Matt, ix, 32. Cured by Jesus. Zacharias was dumb for the space of about nine months. Luke, i, 20, 64. Stammerers are metaphorically referred to in Is. xxxii, 4.

DEAFNESS.—A man is spoken of in Mark, vii, 32, who was “deaf, and had an impediment in his speech.” His deafness was cured by Jesus, and “the string of his tongue was loosened.” Possibly, ankylo-glossia.

STONED.—This was a mode of execution. Ex. xix, 13. Paul was once stoned for dead, but revived. Acts, xiv, 19.

SCOURGING was a mode of punishment. Matt. xxvii, 26. It was a brutal process, and many perished from it before the allotted number of blows were given. Paul states, that “of the Jews, five times received I forty stripes save one. Thrice was I beaten with rods.” 2d Cor., xi, 24, 25.

RAPE.—Two cases are recorded. The first in Jud. xix, 25. The woman was so abused that she died. Her master made a partial dissection of her dead body. Jud. xix, 29, and xx, 5, 6. The second is mentioned in 2d Sam. xiii, 14.

OBSTETRICAL AND DISEASES OF WOMEN.

The disobedience of Eve entailed upon herself and race multiplied sorrow in conception. “In sorrow thou shalt bring forth children.” Gen. iii, 16.

By the law of Moses, if a woman gave birth to a male child, she was unclean seven days, and to continue in the blood of her purifying three and thirty days; if a female, she was unclean fourteen days, and to continue in the blood of her purifying sixty-six days. Lev. xii. Why such a distinction, I know not.

Doubtless the same difficulties were encountered in labors in the primeval days as at the present, although they were not so well understood. I think, from the reading of the following figurative language, that atony

of the womb was recognized: "The children are come to the birth and there is not strength to bring forth." 2d Kings, xix, 3. "We have been with child, we have been in pain, we have, as it were, brought forth wind." Is. xxvi, 18. This reminds us of physometra, and the blasting of fond hopes of some longing, would-be mother. Paul, from his celibate stand-point, wrote to Timothy, concerning women: "She shall be saved in child-bearing if they continue in faith, and charity, and holiness, with sobriety." A metaphorical labor is given in Rev. xii. I will merely quote the following passages: "The barren hath borne seven, and she that hath many children is waxed feeble." 1st Sam. ii, 5. "She that hath borne seven languisheth." Jer. xv, 9.

As soon as the child was born the cord was severed, and its body washed and rubbed with salt, and dressed in swaddling clothes. Ezekiel, xvi, 4.

Putrid-born children are referred to in Num. xii, 12.

THE CALABAR BEAN IN SPINAL MENINGITIS.

BY HENRY G. TODD, M. D.

After suffering the anxiety and disappointment that most physicians in the country have felt in the treatment of spinal meningitis, my mind was directed to the calabar bean, as a remedy offering a better hope of success than any thing I had used, or seen recommended in the journals, its effect, according to Dr. Christison and others, to so modify the action of the spinal nerves as to produce paralysis of the voluntary muscles, the very effect that is indicated in the local tetanus, or opisthotonos of spotted fever. With these views I obtained, more than a year ago, a few of the beans, and, also, a tincture, from Browning & Sloan, containing two ounces of the bean to one pint of alcohol. This being a potent agent,

with no officinal preparation, I did not feel at liberty to prescribe it till I had tested its relative dose by personal experience. I commenced by taking twenty-five drops of this tincture every fifteen or twenty minutes, till I had taken two hundred drops in two and one-half hours. This produced a very marked sensation of languor and indisposition to move, but by an effort of will, my muscles were as fully under my control as before. No contraction of the pupil was discoverable, and the pulse remained without change. The experiment was carried no further and not repeated. I was treating at that time, a child fifteen months old, with quite a violent attack of spinal meningitis. I directed eight drops of the tincture to be given at intervals of three hours. The dose was not increased, but the intervals were shortened when I had opportunity to give personal attention. And here let me remark, that in this, as also in two other cases that I attended shortly afterward, my time was so occupied that I could not remain with my patients, to watch the effect, and the remedy being an active one, and comparatively new, I was afraid to allow any discretionary liberty with the nurse; and though I considered the results very satisfactory, yet it was by no means a proper test of the efficacy of the remedy. In two recent cases in which I have used the bean, however, I have been able to give personal attention, pushing the remedy more vigorously, and with results equal to my most sanguine expectations. In both of these cases, (which were adults,) I used the pulverized bean, as giving a better opportunity to graduate the dose. I commenced with four grains of the powered bean, and repeated with three-grain doses every hour till relief was obtained, from the urgent distress occasioned by the tension of the muscles of the neck and back. This object was partially attained, after the third dose, but comparative ease was secured after the fifth, and the remedy was continued at such intervals as would give

the patient comparative rest and comfort; but in neither of those cases was it pushed far enough to produce contraction of the pupil, though they complained of the depression. This treatment was continued in one of the cases about ten days, the other, a shorter time, when the disease appeared so far recovered that the bromide of ammonia was substituted for the bean, and my patients recovered. Though the above cases were not as violent as we occasionally meet with, yet the symptoms were urgent and distressing, and the relief so speedy and important, that I shall use the remedy hereafter with great confidence; and if the foregoing suggestions should result in a trial of the remedy, by my professional friends, my object will be accomplished, and I hope much suffering relieved.

“EXCISION OF OS-CALCIS AGAIN.”

BY W. S. MENDENHALL, M. D., LAENNA, ILL.*

In the October number of your journal appears a communication by Dr. Duzan, of Zionsville, Ind., and one signed by Drs. Starkey and Bowers, of Whitestown, purporting to be a reply to a review which I made in the September number of a former communication by Dr. Duzan. Now I would not notice this latter article were it not a *mere subterfuge* to mislead your readers, and evade the responsibility and false position in which he had placed himself.

He replies by sending a letter from Drs. Starkey and Bowers, but it bears the unmistakable *ear marks* of having been either written or dictated by Duzan himself, for *it is his language* from beginning to end. It carries its own refutation with it, for they are made to testify to things which happened in Zionsville, while they were in

*I have just learned that a communication I sent you last November was not received. I now send a copy which explains itself.—W. S. M.

Whitestown, six miles away. I was not only *permitted*, but *was solicited* by Duzan in Zionsville to go with him and assist in the operation; and he took me with him in a buggy, and brought me home again. *I did* have a conversation with Mr. Laughne in Zionsville six weeks after the operation, when he brought the child there to have its photograph taken, at which time there was *little or no perceptible* lameness.

All these facts are *too well* known in Zionsville to merit any comment. If Drs. Starkey and Bowers authorize their names used in this manner, it betrays inexcusable ignorance, and only shows their willingness to become the *dupe* for a most *base* and *selfish* end; and their ready yielding of the suppliant knee to the behests of this *egotistical* and *self-exalted* MOGUL of the big woods of Boone.

So far as the operation is concerned I have nothing to add to what I said before, as that was true in every "essential particular." I will now leave the matter with your readers, as they will know what estimate is to be placed upon such a course to *gain notoriety*; and as no gentleman would either *write or reply* to such *malicious* insinuations and epithets as are in the communication purporting to come from Drs. Starkey and Bowers, I therefore dismiss the subject.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, INDIANAPOLIS, IND.

TINNITUS AURIUM CAUSED BY AORTIC ANEURISM.—An elderly lady was troubled with tinnitus aurium, or a buzzing and singing noise in the ear, very annoying, and interfering, to some extent, with sleep. At the request of the family physician I examined her, and found nothing abnormal in the ears, no catarrhal condition, either

of the eustachian tubes or throat, and nothing whatever to account for the disturbance. The hearing power, tested with the watch, was not very good in either ear, but for conversation, it was perfectly normal in both ears. The difficulty had come on simultaneously with an acute pain in the chest, and upon auscultation we discovered evidences of aortic aneurism.

The aneurism progressed until it could be seen and felt above the sternum, and its increase was attended with an augmentation of the ear trouble. Under the use of rest, tonics and arterial sedatives, the tumor decreased in size, and with it the roaring noise in the ear was lessened.

The sound was referred by the patient not to the aneurism, but to the middle ear.

CRESCENTIC ULCER OF THE CORNEA.—A man aet. 35, previously much debilitated by malarial paroxysms, presented himself for treatment, about two months since, complaining of indistinctness of vision, slight photophobia, and considerable supra-orbital pain, much aggravated at night, in the left eye. A feeling as of some foreign body beneath the lids, was also a very annoying symptom. The eye was only slightly reddened; pupil contracted.

Extending along the margin, about one-fourth of the circumference, and wholly confined to the cornea, was an ulcer parallel with the corneo-scleral junction, and looking like a groove or gutter cut with a sharp curved chisel.

This form of ulcer is described as being very rare, dangerous to vision, and very intractable to treatment, and certainly the cases coming under my observation have proved obstinate, to say the least. Occurring, as they generally do in feeble persons, or those whose general health has been broken down by disease, and extending in length and depth so rapidly, they are to be dreaded

owing to the tendency to perforate, or to isolation of the central portion of the cornea, which becomes necrosed and sloughs away, blindness being the result.

The treatment adopted in the case under consideration was, locally, a three-grain solution of sulphate of atropia, to be dropped in the eye, when the compress was removed, and a compress bandage applied over the closed lids, to be changed twice daily; internally, iron, wine and ammonia, cod-liver oil and a liberal diet. The patient had been taking large doses of quinine, without any beneficial effect, and he was therefore advised to abstain from its use for a while.

This treatment having no perceptible result, resource was had to paracentesis, tapping the anterior chamber with a broad needle and allowing the aqueous humor to escape.

Still the ulceration progressed unchecked at both ends of the groove, and iridectomy was performed directly behind it.

After the operation the ulcer healed very rapidly, and at present the patient enjoys very good sight in that eye, the artificial pupil being nearly entirely concealed by the upper lid.

Another case of the same trouble, sent me by Drs. Sims and White, at about the same time, was exhibited at the eye and ear clinic of the Indiana Medical College, and a very doubtful prognosis given. There were, however, in this case, two ulcers, which finally coalesced, forming a continuous ulcerated crescent, which extended around about one-third of the circumference of the cornea in the left eye. In the right eye an ulcer of half-an-line in length, was to be seen in the corner toward the inner margin. Sight was not much disturbed in the right eye, but the patient could distinguish nothing with the left eye.

He was immediately placed under treatment as follows: To take a dessert-spoonful of bitter wine of iron,

four times daily; the eyes to be supported by a compress bandage, and a four-grain solution of atropia to be dropped into them three times a day. A small quantity of calomel was dusted on the ulcerated portion every day. Both eyes recovered with very good vision, though the left eye is slightly astigmatic, and whitish cicatrix does not interfere with the entrance of light into the pupil.

Gleanings from Foreign Journals.

BY GUIDO BELL, M. D., INDIANAPOLIS.

Mr. Schifferdecker says, in regard to the poison of fishes, mollusks and craw-fishes, the cause of that lays not in a disease of the animals, because zymotic diseases of other animals are not obnoxious to man, nor in their rottenness, because Laplanders eat them rotten without any harm. Smoked and pickled fishes have a poison sometimes working like that of sausages. Fresh fishes are poisonous, probably, by physiological differences in the blood, for instance, during the spawning time. The symptoms are diarrhœa, vomiting, pain in the throat, stomach and bowels, prostration, anxiety, spasms, blindness and sopor.—*Bertin klin. Wochensch.*

Dr. Vogt has successfully used the hypodermic injection ergot in varices; twelve grammes every other day. *Ibid.*

Dr. Loewenthal, of Paris, recommends for extraction of foreign bodies from the ear, water-injections; and in cases where the tympanum should not be touched, his new method with a *charpie brush saturated with thick glue*. He mentions an odd case, where he cured the right ear by extracting a button from the left one. Some other physicians had operated on the wrong ear for three weeks and injured it.—*Ibid.*

Out of seventy-seven cases of tracheotomy performed in Berlin, in 1869, ten were successful.—*Ibid.*

A case of *hydrops genu intermittens* was not affected for eight years, by any medicine. It appeared every eleventh day, lasted six days and disappeared for five days. Arsenic cured it within four to five weeks.—*Ibid.*

Dr. Waldenburg, says, the wandering pneumonia is like the wandering erysipelas. Such pneumonia is manifested by increased fever each time.—*Ibid.*

Dr. Hayer's *olfactorium anti-catarrhicum*.—It contains carbolic acid and liquor ammonii; is highly recommended, and to be used by inhaling from the bottle, or some drops from blotting paper; the eyes have to be protected.—*Ibid.*

Dr. P. Bruns publishes a new method of his father for extracting polypus from the nose and pharynx. In bad cases, where the upper jaw bone has been exsected before, Prof. Bruns divides the integuments and bones of the nose on one side and the center, and turns the nose over. Three successful cases are described; in one, the polypus could be removed at once; in the second, the nose was turned back and sewed on on the 21st day; in the third case, on the 12th day. No arteries or other considerable organs are to be cut through; the lacrymal sack can be provided, and the place of operation lays entirely free. Owing to the small space here, we refer to the original in the *Berlin klin. Wochensch.*

The post-mortem dissection of two men killed by chloroform, showed the left ventricle of the heart contracted, and even the coronary artery; the same result was seen by *Kussmauls*, by experiments on animals.—*Ibid.*

A solution of bromine and bromide of potassium is said to dissolve croupous membranes better than lime-water, and should be recommended for local application. *Ibid.*

Dr. Wolf recommends the red-hot iron to the neck in hydrophobia.—*Ibid.*

Ludwig's method of delivering children in the knee-elbow position is differently criticised. A binding around the abdomen supports the womb with it.—*Ibid.*

Mr. Heilberg, of *Kœnigsberg*, reports the experience in *Prof. Schoenborn's* hospital, with oakum. He says it is not disinfectant, because many cases treated with showed erysipelas and other septic affections. He does not think much of the disinfectant method, and alludes to *Billroth's* sentence: "The granulations prevent, like a wall, the infection." Oakum is useful in preventing excess of suppuration. Wounds should be dressed every second or third day; the only indication is a bad smell. *Burow's* method, to keep amputated limbs in the fresh air, is based on the same principle. The matter dries up, and under its integuments granulations are formed.—*Ibid.*

Dr. Burk recommends the acetic acid in psoriasis. The parts have to be softened by baths and soap, and then cauterized daily, as much as possible.—*Ibid.*

Proceedings of Societies.

AMERICAN MEDICAL ASSOCIATION.

TWENTY-THIRD ANNUAL CONGRESS.

The session was opened at 11 o'clock, in the Horticultural Hall, Broad street, Philadelphia.

Was called to order by the president, Dr. D. W. Yandell, of Louisville, Kentucky.

The proceedings were opened with an appropriate prayer by the Right Rev. Wm. Bacon Stevens; M. D., D. D., C. L., Protestant Episcopal Bishop of Pennsylvania.

President Yandell read his annual address, which was received with a vote of thanks by the Association.

In the afternoon of each day, the various sections—of practice, obstetrics, surgery, anatomy, etc.,—met and discussed papers, reports, etc.

The Biological Society held a reception in the evening at the hall, where microscopes, various specimens in pathology, etc., were exhibited. On Wednesday, after much promiscuous business, Dr. J. S. Weatherly, of Alabama, chairman of the committee on medical education, read the report of that committee. It urges the immediate suppression of the cheap medical colleges, through a petition to the State Legislatures, asking for the withdrawal of all charters of institutions of a doubtful character. The committee recommend the adoption of a badge or medal, to be given to all physicians in the country who are deemed eligible for membership in the American Medical Association. It is also recommended that the association shall establish a high standard for medical education and members, to be arranged by a congress of professors and practicing physicians and surgeons, all of whom are members of the American Medical Association.

Dr. T. Parvin, of Indiana, chairman of the committee on medical literature, made a report. The writer asserted that we have an American medical literature of which every one should be proud. This very city has produced works which would make quite a library of themselves, and without which no medical library, however vast and various its volumes, would be complete. The names of four of the living authors of Philadelphia, who specially deserve mention, are George B. Wood, Hugh L. Hodge, Isaac Hayes, and Samuel D. Gross.

The committee favored the idea of offering a triennial prize of \$600 for the best essay, instead of the present plan of giving \$200 to be divided between two each year. They suggest that the chairman of each section deliver an address to his section, as likely to relieve some of the irksomeness of listening to dry essays. A large portion of this report was devoted to advocating the publication of a national monthly journal, under the auspices of the American Medical Association. Referred to the publication committee.

In the evening a lecture was delivered at the University of Pennsylvania, by Dr. Noyes, of New York, on

"The relation of diseases of the inner structure of the eye to other affections of the body."

At the close of this address the audience passed into the chemical lecture room, where Prof. R. E. Rogers delivered a short lecture on the two subjects of spectroscopy and electricity.

During the evening receptions were given to the delegates and their ladies at the residence of Dr. Wm. Pancoast and Dr. H. L. Hodge.

On Thursday, various subjects were acted upon, after which the committee on nomination made the following report:

President.—Dr. Thomas L. Logan, Cal.

First Vice-President.—Dr. Catlin, Conn.

Second Vice-President.—Dr. McPheeters, Va.

Third Vice-President.—Dr. Pollock, Pa.

Fourth Vice-President.—Dr. Briggs, Tenn.

Treasurer.—Dr. Casper Wistar, Pa.

Librarian.—Dr. William Lee, D. C.

Permanent Secretary.—Wm. B. Atkinson.

Assistant Secretary.—Dr. M. A. Fallon, Mo.

Next place of meeting.—St. Louis.

Committee on Arrangements.—Dr. J. B. Johnston, Dr. J. T. Hodges, Dr. J. S. Moore, Dr. Robinson, Dr. Kennard, Dr. Teste, Dr. Brokay, Dr. J. M. Scott, all of St. Louis.

Committee on Publication.—Dr. Atkinf, chairman, Pa.; Dr. D. Murray, Chester, Pa.; Dr. Wm. Lee, District of Columbia; Dr. Caspar Wistar, Pa.; H. F. Askew, Delaware; Dr. A. Meigs, Pa.

Committee on Prize Essays.—Dr. Moore, chairman, Missouri; Dr. Gregory, Missouri; Dr. Davis, Illinois; Dr. Parvin, Indiana; Dr. Mendenhall, Ohio.

Committee on Medical Education.—Dr. Carson, chairman, Ohio; Dr. Tojan, Ga.; Dr. Howard, Md.; Dr. Steel, Col.; Dr. Vanderpool, N. Y.; Dr. Johnson, District of Columbia; Dr. Stout, Ga.; Dr. Welsh, Texas; Dr. Scott, Ark.; Dr. Bailey, N. Y.; Dr. Jones, Ala.; Dr. McRuor, Me.; Dr. Tally, S. C.; Dr. Blaine, N. J.; Dr. Shattuck, Mo.; Dr. Jasques, Va.

Committee on Medical Literature.—Dr. Flint, chairman, N. Y.; Dr. Yandell, Sr., Ky.; Dr. Henderson, Ala.; Dr. Thrall, Ga.; Dr. Leary, Me.

Committee on Medical Necrology.—Dr. Jackson, chairman, Ky.; Dr. Parsons, R. I.; Dr. Hildreth, W. Va.; Dr. Johnson, D. C.; Dr. Simmons, Cal.; Dr. Wariner, Oregon; Dr. Stevens, Ohio; Dr. Agnew, Pa., and others.

OFFICERS OF SECTIONS.

Chemistry and Materia Medica.—Dr. R. E. Rogers, chairman, Philadelphia; Dr. Ephraim Cutter, Secretary, Boston.

Practice of Medicine and Obstetrics.—Dr. D. A. O'Donnell, chairman, Baltimore; Dr. B. F. Dawson, secretary, New York.

Surgery and Anatomy.—Dr. Warner, chairman, Baltimore; Dr. W. Peck, secretary, Iowa.

Climatology and Epidemics.—Dr. Geo. Sutton, chairman, Indiana; Dr. Elisha Harris, secretary, New York.

Medical Jurisprudence, Hygiene and Physiology.—Dr. R. C. Busey, chairman, Washington; Dr. H. B. Arnold, secretary, Baltimore.

Psychology.—Dr. Isaac Ray, chairman, Philadelphia; Dr. John Curwin, secretary, Harrisburg.

The report was accepted.

The committee on ethics presented their report, in which, among other things, the names of certain members were mentioned for exclusion for non-payment of dues; and also the same action in regard to Dr. D. W. Bliss, who is under sentence of expulsion from the society, of D. C.; also, that alumni associations of medical colleges were not entitled to be represented in the association.

A discussion took place as to the admission of delegates from the Academy of Medicine, Freedmen Hospital and Howard Institute, Washington, D. C. They were objected to because they admitted females, and had among them unlicensed physicians.

The report of the committee, which was adverse to admission, was concurred in.

On Friday, reports of special committees were received and referred to the publishing committee.

Professor Gross offered an amendment to the by-laws, modifying the third section, so that instead of a report on medical education, or medical literature, or climatology and epidemic diseases, there shall be annually deliv-

ered before the association, at its general meetings, an address on medicine, one on surgery, one on Midwifery, or the diseases of children, the lecturers to be appointed by the committee on nominations.

Dr. Hartshorne offered a resolution, which among other things, recommended the appointment of a commission of experts by the courts in all capital criminal cases where medical testimony is needed, instead of the present system of employing physicians as witnesses on opposite sides.

Which was adopted.

The formal business of the association being gone through with, the chair addressed the convention in words of thanks for their support of him and his decisions during the sessions of the association. He closed by hoping to meet all the members of the association again on the other side of the Mississippi, at the next annual gathering. He then declared the convention adjourned *sine die*.

INDIANA STATE MEDICAL SOCIETY.

MORNING SESSION.

The Indiana State Medical Society commenced its twenty-second annual session in the lecture room of the Indiana Medical College in Indianapolis at 10 o'clock May 21, 1872.

Dr. H. P. Ayres, of Fort Wayne, elected President at the last annual session, assumed the duties of the Chair with the following address :

Gentlemen of the Indiana State Medical Society—I appreciate the honor you have conferred upon me ; I ask your indulgence and assistance in the discharge of my duties.

Permit me to congratulate you on this reunion of 1872, after the incidents and changes of another year. I hope it will be one memorable for its pleasures, sociabilities and harmonies ; that old friendships may be renewed and perpetuated ; that new ones may be formed and cherished ; but, above all, that new impulses may urge us on as medical men to accomplish the great ob-

ject of our mission, viz: the health and happiness of mankind. And when we return to our homes may we be invigorated and strengthened for the duties and labors of another year, continually looking forward with pleasure to other, and still other reunions, while life continues. I thank you for the honor.

The Finance Committee submitted the following recommendation:

Your committee would suggest that in their opinion the dues should be three dollars per member.

T. M. STEVENS, Chairman.

The Committee on Credentials recommended the following delegates for membership in the State Medical Society:

Dr. John H. Spurrier, Rush Medical Society.

Dr. Wm. M. Hill, Mott Medical Society, Greenfield.

Dr. H. Tilson, Mott Medical Society, Greenfield.

Dr. M. M. Adams, Mott Medical Society, Greenfield.

Dr. H. C. Vincent, Dearbon County Medical Society, Lawrenceburg.

Dr. J. M. Runyan, Wabash County Medical Society, Wabash.

Dr. T. C. Kimball, Grant County Medical Society, Xenia.

Dr. J. L. Gilbert, N. E. Indiana Medical Society, Kendallville.

Dr. Thomas C. Van Nuys, Evansville Medical Society, Evansville.

Dr. W. R. Davidson, Evansville Medical Society, Evansville.

Dr. L. J. Woollen, Switzerland Medical Society, Moorefield.

Dr. J. S. Gregg, Allen County Medical Society, Fort Wayne.

Dr. James H. Bates, Grant County Medical Society, Jonesboro.

Dr. John H. McIntyre, Wayne County Medical Society, Richmond.

Dr. Edwin Hadley, Wayne County Medical Society, Richmond.

Dr. W. C. Williams, N. E. Indiana Medical Society, Albion.

Dr. I. Casselberry submitted the following report:

The Committee on Membership at Large, respectfully recommend for admission the following persons :

Dr. J. F. Mitchell, Vernon, Jennings county, Indiana.

Dr. William N. McCoy, Jeffersonville, Indiana.

Dr. J. C. Driver, Sheildsville, Hamilton county, Indiana.

Dr. W. M. Glass, Sheildsville, Hamilton county, Indiana.

Dr. J. G. Jones, North Vernon, Jennings county, Ind.

Dr. Edmund D. Laughlin, Orleans, Orange county, Indiana.

Dr. John D. Simpson, Bedford, Lawrence county, Ind.

Dr. Wm. I. Hall, of Gessio, Vermillion county, Ind.

Both reports were concurred in and the persons named elected to membership.

Dr. James H. Woodburn, Treasurer, submitted the following as his annual report :

Your Treasurer respectfully submits the following—

Received of Secretary Woolen, dues.....	\$593 00
Paid balance due last year.....	\$69 01
Paid interest on balance.....	4 32
Paid J. G. Doughty, printing Transactions..	392 90
Paid Wright, Baker & Co., certificates.....	3 50
Paid Todd & Carmichael, stationery.....	7 80
Paid M. Meyer, janitor.....	10 00
Paid C. W. Stagg, reporting.....	46 75
Paid R. J. Bright, circulars, etc.....	9 75
Paid J. H. Holliday, advertising.....	6 50
Paid L. D. Waterman, postage.....	3 40
Paid G. V. Woolen, postage.....	34 50
	<hr/> \$588 43

Balance in Treasury..... \$ 4 57

JAMES H. WOODBURN, Treasurer.

The reports of the officers were referred to the Finance Committee.

Dr. Woolen submitted the following :

REPORT OF THE COMMITTEE ON PUBLICATION.

Your Committee would respectfully report that they have issued 350 copies of the transactions of last year at a cost of \$392.90, and have sent a copy to each member who has paid his dues ; also a copy to each of the leading journals of the country.

The physicians of Indianapolis very kindly furnished the engraving of the late Professor J. S. Bobbs, which is in the Transactions. G. V. WOOLEN, Chairman.

The Finance Committee submitted the following report :

Your Committee would respectfully report that they have examined the Treasurer's account and find it correct.

T. M. STEVENS, Chairman.

The report was concurred in.

The Congressional Districts were called for reports in the department of Medical Statistics, and the Fourth and Ninth Districts responded.

Dr. Wilson Hobbs moved to make the report of the Special Committee on Dr. Lomax's paper appointed at the last annual session the special order for the evening session. Carried.

Dr. S. C. Munford, of Princeton, read a paper on Hydrocele.

On motion of Dr. L. D. Waterman, the thanks of the Society were tendered Dr. Munford for his paper, and he was requested to submit it to the *Indiana Journal of Medicine* for publication.

The Society then adjourned till half-past one o'clock P. M.

AFTERNOON SESSION.

The Society was called to order by the President, Dr. Ayres.

The following papers were read and referred to the Committee on Publication :

By Dr. R. E. Haughton, of Richmond—On the Pathology of Malignant and Semi-Malignant Growths.

By Dr. L. J. Woollen, of Moorfield—On an Epidemic of Parotitis (mumps) in Switzerland county.

By the President—His annual address.

By Dr. T. C. Van Nuys, of Evansville—Researches in Arsenical Poisoning.

By Dr. J. Thompson, of Indianapolis—On the Anomalies of Refraction and Accommodation.

By Dr. Wilson Hobbs, of Carthage—On Expert Testimony, the conduct of witnesses in court and the law which governs it.

EVENING SESSION.

The Society was called to order by the President.

Dr. Lomax, from a special committee appointed at the last annual session on the objects and duties of the Indi-

ana State Medical Society, submitted a report signed by all the committee, and embracing the following resolutions :

1. *Resolved*, That it is the duty of the Society to at once adopt such measures as may tend most directly to bring the entire profession of the State into one harmonious body, for the purpose of carrying out the objects for which the Society was organized.

2. *Resolved*, That a committee of three from each Congressional District in the State be appointed to confer with such County Societies as may exist within their respective districts and secure as far as possible the adoption by them of a uniform constitution auxiliary to the State Society, and also the incorporation of such local Societies under the laws of the State, and in those counties where no such Medical Societies exist use every effort to effect their organization.

3. *Resolved*, That such District Committees shall report to the Secretary of the State Society every local Society that shall have been thus incorporated, as soon as such incorporation shall have been perfected, with the names and postoffice addresses of all its officers and members, and when twelve such County Societies shall have been reported, the Secretary of the State Society shall at once notify such corporate County Societies to elect delegates in the ratio of representation prescribed by Section 1 of Article IV of the Constitution, to meet in Convention at such time and place as he, the Secretary of the State Society, shall designate, to organize and incorporate the State Society under the law of the State, and that such delegation when thus assembled, shall proceed to elect their officers and adopt a Constitution, and have the same legally recorded, and do all acts and things necessary to secure to the State Society all the powers, privileges and immunities of a corporate body.

4. *Resolved*, That a committee of five be appointed to prepare a suitable form of constitution for the organization of County Societies, to be presented for approval at the present meeting, and that such forms be furnished the committees on organization for use in aiding the organization of such societies.

5. *Resolved*, That an assessment of two dollars be

levied on each and every member of County Societies for the use of the State Society.

On motion the resolutions were considered *seriatim*.

The first and second resolutions were adopted.

Dr. R. N. Todd moved to amend the third resolution so as to instruct the contemplated convention of delegates to frame the law so that the present permanent membership of the State Medical Society in good standing shall be retained in the proposed incorporation.

The amendment prevailed, and the third resolution, so amended, was adopted.

The fourth and fifth resolutions were adopted.

The Chair appointed as the committee to form the constitution of county societies, Drs. W. Lomax, Jas. H. Woodburn, Wilson Hobbs, William Scott, G. W. H. Kemper and John Moffitt.

The Society then adjourned till 8 A. M. to-morrow.

MORNING SESSION.

The Society came to order at eight o'clock, the President in the chair.

The President appointed the following standing committees:

On Prize Essays—Drs. T. Parvin, of Indianapolis; S. E. Munford, of Princeton, and G. W. H. Kemper, of Muncie.

On Medical Ethics—Drs. V. Kersey, of Richmond; F. J. Van Voris, of Indianapolis, and J. S. Gregg, of Fort Wayne.

On Arrangements—Drs. A. W. Davis, S. E. Tomlinson, and F. J. Van Voris, all of Indianapolis.

On Finance—Drs. W. B. Lyons, of Huntington; W. F. Cady, of Lafayette, and Isaac Casselberry, of Evansville.

On Publication—Drs. G. V. Woolen, W. J. Elstun, T. M. Stevens, and J. A. Cominger, all of Indianapolis.

On Legal Medicine—Drs. Thad. M. Stevens, of Indianapolis; S. E. Munford, of Princeton; I. Casselberry, of Evansville; R. E. Haughton, of Richmond, and C. Robbins, of Brooklyn.

On Nominations—Drs. C. S. Arthur, of Portland; Isaac Casselberry, of Evansville; W. Lowry, of Marion;

T. M. Stevens, of Indianapolis, and Edwin Hadley, of Richmond.

The Committee on Credentials reported correct the credentials of Drs. F. J. Spillman, of the Rush Medical Society; W. H. Bell, of Brainard Medical Society; and George Sutton, of the Dearborn County Medical Society.

The Committee on Membership at Large reported in favor of the admission to membership of Drs. Jas. O. Ward, of Peru, and Simeon S. Marsh, of Reserve.

Both reports were concurred in and the persons therein named elected to membership.

The Committee on Medical Statistics was, on motion, continued for the ensuing year.

Dr. Thaddeus M. Stevens, of Indianapolis, read a paper on Legal Medicine. The paper advocated the formation of a corps of medical experts, with a view to the relief of the profession in general from the embarrassment of examination in court. It also advised that when physicians are called to testify on questions of sanity, they confine their answers to the simple question as to whether the party is sane or insane, without attempting to define the particular grade of insanity in any case.

Dr. John Moffit, of Rushville, said the advice of the essayist would do very well if courts and lawyers would be put off by such an answer, but that the witness was sure to be probed to the very bottom of his knowledge on cross-examination, and must either show himself thoroughly acquainted with the subject or leave the stand in disgrace. The only way for the medicine man to meet the difficulty was to understand the matter whereof he speaks, or say he knows nothing about it before he is called upon the stand.

The paper was then referred to the Committee on Publication.

Dr. C. E. Wright, of Indianapolis, read a paper on Diseases of the Eye and Ear. Referred to the Committee on Publication.

Dr. R. E. Haughton, of Richmond, from a special committee, submitted the following report:

The Committee to whom was referred the subject of petitioning the Legislature, beg leave respectfully to report the following resolution:

Resolved, That a committee of three be appointed to

petition the Legislature of Indiana for the passage of an anatomical law, embodying such rights and protection, as well as such wise restraints, as shall prevent abuse in the study of anatomy, pathology and surgery as shall not subject the profession to odium, but which will enable its members successfully to qualify themselves for the practice of their profession, and fill the position of medical witnesses and experts in a satisfactory and honorable manner, thus facilitating the administration of justice and promoting the interests of science.

The report was concurred in and resolution adopted.

Dr. N. Field, of Jeffersonville, announced the death of Dr. Robert Curran, of Jeffersonville. Appropriate resolutions were passed.

Dr. T. Parvin presented a communication from the Committee on Medical Education of the National Medical Association.

Dr. T. M. Stevens, from the Standing Committee on Nominations, submitted the following report, which was concurred in :

The Committee on Nominations respectfully nominated for President—Joel Pennington, of Milton.

For Vice President—R. E. Haughton, of Richmond.

For Secretary—G. V. Woolen, of Indianapolis.

For Asst. Secretary—W. J. Elstun, of Indianapolis.

For Treasurer—J. H. Woodburn, of Indianapolis.

For Librarian—A. W. Davis, of Indianapolis.

For Delegates to National Medical Association—Drs. Wm. Lomax, E. H. Crispen, J. Helm of Peru, H. V. Passagè, G. W. Mears, S. B. Harvey, Edwin Hadley, John Cominger, Gregg of Fort Wayne, B. S. Woodworth, Wm. Cady, Thos. C. Van Nuys, S. E. Monford, Wm. R. Davidson, N. Field, George Sutton, A. G. Preston, I. F. Beckner, I. O. Walker, A. M. Vickrey, H. P. Ayres, Isaac Johnston, R. B. Jessup, V. Kersey, R. N. Todd, J. H. Woodburn, R. L. Mauzy, J. I. Rooker, P. McNab, T. S. C. Grayston, Wm. Scoff, D. Walker.

Delegates to the State Medical Society of Kentucky—Drs. Isaac Casselberry, Thos. C. Van Nuys.

Delegates to Ohio Medical Society—Drs. C. S. Arthur, T. Parvin, L. D. Waterman.

Delegates to Illinois State Medical Society—Drs. R. N. Todd, T. M. Stevens, G. W. Mears.

Delegates to Michigan State Society—Drs. H. P. Ayres, T. S. C. Grayston and J. A. Comingor.

Dr. N. Field, of Jeffersonville, read a paper on Theoracentesis, which was discussed by Drs. R. N. Todd, of Indianapolis; J. I. Rooker, of Castleton; H. V. Passage, of Peru, and R. E. Haughton, of Richmond.

Dr. R. E. Haughton read a paper on Lithotomy, which was discussed by Drs. Comingor, Boyd, Waterman and Haughton.

The Society then adjourned till 1½ P. M.

AFTERNOON SESSION.

The Society was called to order by the President.

Dr. Isaac Casselberry, of Evansville, read a paper on Electricity as a Cause of Disease, which was referred to the Committee on Publication.

Dr. Woodburn, from the Committee on Ethics, submitted the following report, which, on motion of Dr. Waterman, was concurred in:

Your Committee have examined the charges preferred last year against Dr. Grayston for violating the code of ethics, and report that, after hearing the testimony, we find him *not guilty*.

Dr. Woodburn, from the Committee on Ethics, reported in favor of the expulsion of J. T. Brenton, M. D., of Edinburg, for having signed the following certificate:

EDINBURG, IND., Aug. 28, 1871.

This is to certify that I have used Brown's Expectorant in my family since its first introduction. It has never failed to give entire satisfaction. My wife is subject to bronchitis, and I have no remedy equal to Brown's Expectorant. I recommend it as a safe and reliable medicine.

J. T. BRENTON, M. D.

Dr. Comingor moved to refer the case back to the Committee with instructions to cite Dr. Brenton to trial, and to report at the next annual session.

Dr. G. Sutton, of Aurora, offered, for adoption, the following resolution, which was adopted:

Resolved, That we recommend to the Board of Trustees of the Indiana University that they introduce as soon as practicable, either into the scientific or medical department, a course of studies embracing comparative

anatomy, comparative physiology, and comparative pathology—branches of science arising from the progress of knowledge, becoming daily of great practical importance in understanding the paleontology of our country, the zoology of our State, and the diseases which are producing such destructive ravages amongst our domestic animals.

Dr. T. M. Stevens moved that the Secretary be instructed to transmit a certified copy of the resolution to the Trustees of the Indiana State University. Carried.

Dr. L. D. Waterman, of Indianapolis, read a paper on Secondary Effects of Remedies, which, after discussion, was referred to the Committee on Publication.

Dr. T. Parvin, from a special committee, submitted the following report:

The committee to whom was referred the communication from the Special Committee on Medical Education of the American Medical Association, beg leave to present the following report:

This communication embraces, as inviting the action of the Indiana State Medical Society, first, resolutions relating to the admission of persons to the practice of medicine, providing for the examination of such, for the compensation of such examiners, and affixing a penalty for neglecting such examination; and, second, a resolution relating to the admission of those desiring to study medicine to the offices of physicians or to medical colleges.

We believe the elevation of the profession must arise from a force within itself, that all exterior ends are merely secondary. And we should believe a most important step towards their elevation will be taken when the medical profession shall determine whom they will recognize as qualified students and qualified practitioners. We therefore recommend the adoption of the several resolutions; and if their adoption should be made with hearty unanimity, or even an approximation to it, we believe the good health will be neither tardy nor doubtful.

Should their State Society take such action, it places itself in the way of progress in medical education in this country, for only four other State Societies have this action.

The thanks of the Society were tendered to President Ayres, and to the Secretary and Assistant Secretary, for their efficient services; to the Trustees of the Indiana Medical College for the use of their hall; to the railroads who so kindly accommodated the delegates and members with reduced fare; and to the press of the city for the daily reports of proceedings.

Dr. F. J. Van Voris, of Indianapolis, offered the following resolution, which was adopted:

Resolved, That this Society recommend to the Legislature of Indiana to adopt and incorporate the Indiana Medical College as a branch of the Indiana State University, with all the powers, rights and privileges thereunto pertaining.

The Society then adjourned till eight o'clock P. M.

EVENING SESSION.

The Society was called to order by the President.

On motion, the paper by Robert Curran, M. D., entitled *Nosology of the Diseases which have prevailed in Clark county, Indiana, since A. D. 1833*, was read by its title, and referred to the Committee on Publication.

Dr. T. B. Harvey moved that the action continuing the Committee on Medical Statistics be abrogated, that committee discharged, and that a new committee be appointed, with Dr. G. Sutton, of Aurora, as chairman. Carried.

Dr. T. M. Stevens moved that Dr. Sutton, chairman, and Dr. Woolen, secretary of the Society, be empowered to appoint the members of the committee. Carried.

The Secretary read the following list of special committees to prepare papers for the next annual session:

On Cerebro Spinal Meningitis, by Dr. Wm. F. Cady, of Lafayette.

On the Correlation of Physical and Vital Forces, by R. E. Haughton, of Richmond.

Experimental Researches into the Poisonous and Chemical Properties of Atropia, by Dr. Thomas C. Van Nuys, of Evansville.

On the Toxicological action of and examination for the Alkaloid, Thad. M. Stevens, M. D., Indianapolis.

On the Secondary Effects of Gunshot Wounds, by Dr. J. S. Gregg, of Fort Wayne.

On Cerebral Meningitis as it prevailed in Montgomery county, Indiana, during the spring of 1872, by Samuel G. Irwin, M. D., of Crawfordsville.

On Malignant Tumors, by Dr. L. D. Waterman, of Indianapolis.

On Surgical Cases which have fallen under my observation, by J. S. McClelland, of Crawfordsville.

On Chemico Legal Investigations, by Dr. P. McNab, of West Newton.

On Cholera Infantum, by Dr. G. N. Duzan, Zionsville.

On Diseases of the Eye and Ear, by Dr. C. E. Wright, of Indianapolis.

On such subject as he may choose, by Dr. J. W. Hervey, of Oakland.

On motion of Dr. Waterman, the Secretary was authorized to add such further essays to the list as should be handed to him in time for publication in the printed proceedings of the session.

The Society then adjourned till the third Tuesday of May, 1873.

RUSH MEDICAL SOCIETY.

The Union District Medical Association held its semi-annual meeting in the city of Hamilton, Ohio, on Thursday, the 25th of April, 1872. This body is formed by an association of medical men residing in the counties of Butler and Preble in Ohio, and Vernon, Wayne, Fayette, Franklin and Rush of Indiana. It has had existence for the past four or five years, and was first started by the physicians of Oxford, Ohio, it was finally extended along the line of the Junction Railroad as far west as Rush county, Indiana, and at the meeting at Rushville, two years since, by application of some of the prominent physicians of Richmond, Indiana, Wayne county was added to the list. It has had about eighty-five names enrolled upon its book, and has an average attendance of forty to forty-five of zealous working men in their profession. Its meetings are held on the first Thursday of May, and the second Thursday of October of each year. Its meetings are characterized by industry, harmony, and faithful work.

The papers presented are of the highest order of medical literature; and the discussions are characterized by a high degree of forensic ability. Just large enough in numbers to

be easily handled, and to throw off the restraints of larger bodies.

The first paper read was by Dr. Wilson Hobbs, of Carthage, Rush county, Indiana, on "*The Legal Relations of Medical Experts.*" This was in the happiest style of the author, and called forth the highest encomiums from the members; written in terse, plain and cogent language, with well rounded sentences, full of facts and suggestions, it did honor to its author and credit to the association. As it was ordered to be sent to your Journal for publication, I will not attempt a recapitulation—only giving my endorsement of its sterling worth and merits.

The next paper was on "*The Influence of Cold causing Disease,*" by Dr. Saunders, of Oxford, Ohio. The doctor opposed the commonly received doctrine of *taking cold*. and said that the causes were to be sought for within and not from without the body—attributing the so called pathological condition "taking cold" to causes arising from gastric disturbance; hence irregular nervous action, hence peripheric changes. The paper was full of good, sound, suggestive thoughts, indicating great care in its preparation. It was passed by without discussion, and, we thought, without that consideration by the society which its merits deserved—and we heard quite a number of members express the same opinion. We hope Dr. Saunders may be induced to put his production in more permanent form, by having it published in some of our medical prints.

After the reading of this paper, Dr. Wilson Hobbs presented a little boy, an inmate of the Soldiers' and Sailors' Orphan Home, at Knightstown, upon whom he had performed the operation of re-section of the head of the humerus on the right side, and of the head of the femur on the left side. The operation of re-section of the head of the bone was performed at once. The hip joint was known to be injured at the time, but the extent not fully ascertained, a large abscess formed subsequently communicating with the great joint of the hip. In six weeks after the injury and the first operation the second one was performed. His history was given of the case at the Richmond meeting, in October last, and the question there was, How are we to get the lad on his feet? He finally got upon his feet, and the doctor brought him down to show the result. This I regard as one of the great triumphs of conservative surgery; the patient will have very good locomotion, and will be able to make a livelihood.

Dr. M. Sexton, of Rushville, next presented two specimens of diseased testicles, with a verbal report of the cases. The first one of a dense fibrous or scirrhus structure, which had

been diseased for seven years before its removal; the patient died in two weeks after the operation, from disease suddenly developed in the pulmonary organs. The second one was removed from a young man twenty-three years old, and had been of three years duration; the disease was developed shortly after an attack of the mumps—this was of the encysted variety—the cavity contained about a gill of wine colored fluid; the organ weighed about four ounces after its contents had escaped; the patient made a good recovery.

This paper was followed by quite a lengthy discussion on the time-honored subject, "*Progress of Medicine*," by Dr. Pinkerton, of Liberty, Indiana. The greatest effect of this paper was to sharpen the appetites of members for the rich repast, contributed by the Butler county Society, for the wants of the inner man, which had been a long time in waiting at the Central Hotel. The hours of recess was consumed by members in making away with the above mentioned refreshments, and in riding through the city—Hamilton with her great water power and excellent manufacturing advantages is only just begining to come out of the ashes—but I must not digress, for this is to contain nothing but a *morceau* of medical matters.

After dinner, some informal business in relation to the admission of an applicant for membership was gone through with, when Dr. Beauchamps, of Hamilton, read an essay upon the question, "Has sulphate of quinine any power as a parturient agent?" The doctor is a vigorous writer, and read his production with great animation and enthusiasm. A lively discussion followed its reading, and was participated in by a large number of the members. The sentiments of the members were about equally divided on the question, but they took a wide range; leaving the main question and branching off on ergot and every other article of *materia medica*, which has ever had any reputation as having parturent powers. It would make my letter entirely too long to attempt to give the views in full of the author, or the various opinions advanced by the members.

The last essay was by Dr. R. E. Houghton, of Richmond, on "*Pyemia, Thrombosis and Emboli*," which was one of scientific value, and showed great research on the part of the author. By the way, Dr. H. always reads able and elaborate papers, full of practical thoughts and suggestions, carefully written, of a high degree of literary merit, and free from all extraneous matters to the subject in hand, they are always of unquestionable excellence, rich in information and eminently practical in all their parts. The doctor also reported in writing a case of lithotomy with specimen, and a carefully prepared chemical analysis of the stone, by the Professor on

Natural Sciences in Earlham College. The stone was of very unusual size, one of the largest, perhaps, on record—not having taken notes of the case I will not attempt to give the analysis.

After appointing several gentlemen as essayists for the next meeting, Rushville, Indiana, was chosen as the place where such meeting will be held. I had intended writing a short sketch of the status of medicine in this part of our State, but find my letter already too long, and will have to postpone it until another time.

WM. A. PUGH.

PROCEEDINGS OF MOTT MEDICAL SOCIETY.

GREENFIELD, IND., Jan. 2, 1872.

Society met in Odd Fellows' Hall, at 10:15 A. M. The President, Dr. W. Hobbs, being absent, Dr. S. M. Martin, Vice President, took the chair and called the meeting to order.

MEMBERS PRESENT—Drs. N. H. Canaday, N. P. Howard, S. M. Martin, J. M. Whitsell, M. M. Adams and D. W. Butler.

The Secretary being absent, Dr. D. W. Butler was appointed Secretary *pro tem*.

Upon motion of Dr. Canaday, the Society went into the election of officers for the ensuing year, which resulted as follows: Dr. N. H. Canaday, of Knightstown, President; Dr. J. J. Carter, of Eden, Vice President; Dr. E. I. Judkins, of Greenfield, Secretary; Dr. J. M. Whitsell, of Knightstown, Treasurer.

COMMITTEE ON MEMBERSHIP—Drs. W. Hobbs, of Carthage; M. M. Adams, of Greenfield, and D. W. Butler, of Dunreith.

The President-elect, Dr. Canaday, then took the chair, and appointed the following Standing Committees, viz:

On Publication—Drs. Judkins, Hobbs and Stewart.

On New Remedies—Drs. Tilson, Troy and McGavern.

On Literature—Drs. Martin, Butler and Boles.

Society adjourned to meet at 1½ P. M.

D. W. BUTLER, Secretary *pro tem*.

AFTERNOON SESSION.

Society met pursuant to adjournment.

Upon motion and unanimous vote of the Society, Prof. T. B. Harvey, of Indianapolis, was elected an honorary member of this Society.

Dr. Butler, of Dunreith, read a paper on Idiopathic Tetanus in a boy twelve years old, terminating fatally in eleven days, which elicited quite a lengthy discussion, participated

in by Drs. Tilson, Troy, Canaday, S. M. Martin, Prof. Harvey, and others.

Dr. S. M. Martin read a paper on Puerperal Convulsions, detailing seven cases, four of which occurred in his own practice, the other three in that of other physicians here, but two of the number proving fatal. Bleeding, chloroform, and chloral, as indications seemed to require, were the main remedies used in the cases treated by the reporter.

Dr. Butler had but little experience in such cases, having never met but one in his practice; believes venesection and chloroform the main remedies.

Dr. Tilson, in a practice of eighteen years, never had a case of eclampsia; disbelieves *generally* in venesection.

Dr. Judkins—In a practice of eight years, had never met one of those *terrible* cases; thinks bleeding, chloroform, chloral, or opii, as symptoms seem to indicate, the main remedies to be relied upon.

Dr. Troy—Physicians who have never met a case of eclampsia in parturition, will see one more ghost than they ever saw before, when they *do meet* one; cited some cases met with, in which bleeding, chloroform, etc., were used, sometimes successfully.

Prof. Harvey—Thinks eclampsia may result from centric or excentric causes; cases should be thoroughly discriminated. Had met eleven cases (four in consultation), two apoplectic, from whom blood would not flow. In dropsical patients bleeding inadmissible; relies mainly on chloroform and opium; next to these, hydragogue cathartics give more permanent relief; bleeding in acute attacks sometimes indispensable; most cases occur after parturition; where they assume apoplectic character, believes nothing will save patient; cited cases.

Dr. Howard—Relies upon bleeding, chloroform, opii, and cathartics; when they fail, all fails.

Dr. Canaday—As taught, bled in both arms in convulsions, in early practice, but now does not so often bleed; believes bleeding best in *some cases*; thinks cases should be more thoroughly discriminated, as to cause, and remedies applied to remove it; detailed some cases.

Here the discussion turned upon the use of chloroform in parturition. Dr. Butler has used it in over twenty-five cases, with no unfavorable results; uses it *now*, more or less, in all cases.

Prof. Harvey—Thinks we ought to use more chloroform in parturition; never saw ill effects from its use but once; believes its use tends to prevent convulsions.

Dr. Judkins—Have used chloroform in two cases only, and then not to full anesthesia; did not like its effects; ob-

jects to its *general* use in parturition; thinks it will prevent convulsions in some threatened cases, if used in time.

Several other members had never given it a trial in parturition.

Dr. Howard, by request of the Society, read a paper on Singular Gunshot Wound of the Abdominal Viscera (heretofore read to this Society), with recovery. The paper was discussed at some length by Drs Butler, Harvey, Tilson and others.

Here a resolution, submitted at last meeting, to change the By-Laws in reference to time and place of meeting, was taken up, discussed, and then passed, as follows, viz: "The time of meeting shall be the first Thursday of each month, and the place or places shall be alternate, between Knightstown and Greenfield, beginning this day, Jan. 2, 1872, at Greenfield, Ind."

Upon motion, the papers read by Drs. Butler, Martin and Howard were claimed by the Society for publication, and were referred to the Committee on Publication.

Upon motion, it was ordered that a copy of the proceedings of this meeting be furnished the *Indiana Journal of Medicine* for publication.

A resolution requiring the Secretary to make annual report to the Society, was adopted.

Upon motion, Prof. T. B. Harvey, the profession of Indianapolis, and elsewhere generally, were cordially invited to attend our meetings.

The Society then adjourned, to meet at Knightstown on the first Thursday of February next, at one o'clock P. M.

E. I. JUDKINS, Secretary.

Editorial.

ALL who find their bills enclosed in this number of the JOURNAL will please remit, or the editor will consider they do not wish to remain subscribers.

THE present number is mainly devoted to proceedings of societies. It may be dull to some, to others interesting; all must be accommodated.

SOME one inadvertently took Dr. Woolen's copy of last year's Transactions away at the recent meeting of the association, and has rendered it very difficult for him to make a correct report this year, as it contained a great many memoranda that he needs. They will confer a great favor on him by returning it and getting another.

Dr Hays

INDIANA JOURNAL OF MEDICINE.

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No. 3.

Original Communications.

GLANCOMA*.

BY W. C. THOMPSON, M. D., INDIANAPOLIS.

MR. PRESIDENT AND GENTLEMEN :—The subject to which I briefly call your attention this evening is *glancoma*, one of the most important and dangerous diseases which can affect the organ of vision. One, which by timely treatment yields results highly favorable; but, if not recognized early, or if improperly treated, almost invariably results in total destruction of vision. * * *

The name glancoma, is, we think objectionable, as it simply expresses the pea-green appearance of the pupil. It has existed so long, however, that it is not an easy matter to change it. A name bearing upon or pointing to the intraocular tension, instead of to the color, would, we think, have been more to the point. The color is variable, while the increased tension is almost always present.

Hypocrates and other ancient Greeks, comprehended under it every kind of opacity which appeared behind the pupil. But we are told that Rufus, Galen, Paul of

*Read before the Indiana Academy of Medicine.

Ejina, and others restricted the term to the *incurable* opacities behind the pupil, while to the *curable*, they gave the name of hypochyma; the former they suppose to be a disease of the lens, the latter to be a concretion in front of the lens.

It is not my intention, however, to weary you with the writings of the ancients. They failed in their treatment as did all others, until after the discovery of the ophthalmoscope by Helmholtz, in 1851. With its use investigators soon began to discover changes in the fundus of the eye, especially cupping of the optic disc, tortuosity of the retinal veins, the occasional pulsation of the retinal arteries, hemorrhagic effusions, occasional, and sometimes permanent cloudiness of the humors, etc.

Great as was the advance concerning pathological conditions, still greater was that in the treatment, which was discovered by the late Von Graefe, a few years subsequently. For, whereas, prior to its treatment by the operation known as iridectomy, we had to contend against a terrible monster which baffled all our efforts, which seldom left the patient with even the slightest perception of light, now, we can almost bid defiance to its ravages.

Cases are divided as follows:

1st. Those which have inflammatory symptoms.

2d. Cases attended with no apparent inflammatory symptoms. It may also be primary or consecutive.

Wells, Graefe, and others speak of the four following stages: 1. A premonitory stage. 2. A stage in which it is fully developed. 3. A stage in which quantitative perception of light has been completely lost for some time. 4. A stage in which the eye undergoes glaucomatous degeneration.

Now, as it would occupy too much time to go into a minute description of the symptoms of each class separately, and as it is unnecessary, owing to the classes and stages running imperceptibly into each other, we

will therefore confine ourselves to the symptoms usual in most cases; and will here state, that in but few do we expect to find all of them present, but some in one, while others are manifest in other cases.

The disease may come on in such an insidious manner, with but little pain, that we may not be consulted until vision is materially impaired. Then it may take an acute form, or even the fulminating course, with excruciating pain, and vision may be lost in less than twenty-four hours. Again, it may commence as an acute inflammatory attack, subside, and afterward assume the simple insidious form, and escape one's observation unless on one's guard.

It is mostly a disease of advanced life, and females are more frequently attacked than males. A rapid increase of presbyopia, the patient having to change spectacles for stronger ones at short intervals. The noticing rainbow colors round a light, or flashes of light before the eyes, or determination of blood—or to use their language, rushes of blood—to the head, with venous ciliary hyperæmia; a peculiar dazzling sensation before the eyes, ciliary neuralgia, with nausea and vomiting; especially when either of the above mentioned symptoms is accompanied with dimness of vision, then should one be on his guard, and if we do not yet detect glaucoma, we should impress the patient with the importance of the symptoms, and should urge them to again present themselves when similar symptoms recur.

We should also be careful to examine the tension and compare it with that of the other eye. This requires a great amount of practice on the normal eye, for I have seen novices examine glaucomatous eyes, and have heard them pronounce tension normal (Tu), even when it was +3. This should be done by placing the pulp of one index finger gently upon the organ, and then making counter pressure with the other index finger. We should then notice whether the pupil is dilated and sluggish, or

the anterior chamber more shallow than usual. We should also examine with the ophthalmoscope, and ascertain whether cloudiness of the vitreous exists, or cupping of the disc, or if pulsation of the arteries can be seen, and if not, we should find out how much pressure is required to cause them to be seen to do so. We should also test the acuteness of vision, and the field of vision, remembering that in this disease the field usually becomes contracted on the nasal side.

Brief as are the aforesaid signs and symptoms, and tests spoken of, still they are sufficient to put one on one's guard so as to enable him to grapple with the disorder.

The disease is frequently secondary, and often follows inflammations and injuries of the eye. Among some of the causes the following may be mentioned: Keratitis pannosa, diffuse keratitis, selero keratitis, corneal cicatrices, iritis of every variety, but especially the serous form which so frequently results in synechia posterior; choroiditis of every form, especially (as in iritis) the serous form; intra-ocular tumors, displacement of the crystalline lens, etc., etc.

In regard to the nature and causes of the glaucomatous process, much difference of opinion exists. In a great majority of cases true inflammatory symptoms are manifest; then again, we meet with a small minority of cases in which we fail to discover a single symptom which we can point to as inflammatory.

These few cases of glaucoma simplex are the ones which have given authors so much perplexity. Did they all manifest inflammatory symptoms, then could we easily account for the increased tension, cloudiness of humors, dimness of vision, and indeed all of the signs and symptoms connected therewith.

Many factors could be spoken of as aiding in the causation of this disorder, but no single one can be pointed to as the one *per se*.

After enumerating many of the supposed causes, Von Graefe remarks: "In what does the essential cause consist? In the senile changes of the tissues of the eye—selera, hyaloida, etc.,—in sclerosis of the arteries, alterations of the secretory nerves. All may be supposed by particular reasons, but no one proved by decisive facts. Moreover, secondary glaucoma shows that the process may occur at any age, provided the cause is sufficiently active, but the younger the patient so much the more active or persistent must be the latter. In a word the (internal) cause of primary glaucoma is scarcely found to exist, except with the decided tendency caused by advanced age."

* * * * * "The more ready increase of tension is very possibly due to the secretory fibres contained in the ciliary nerves being more susceptible to irritation when transmitted through a senile rigid selera, than when the latter yields as in youth." * * * * *

Treatment. Much as we may be in the fog, or in doubt concerning its pathology, it is not so concerning the treatment.

Formerly, bleeding and mercury were almost entirely relied on, and the result was that few cases were improved. Tapping the anterior chamber was often resorted to, which relieved the cases temporarily but not permanently.

Iridectomy has entirely revolutionized the practice. It was first applied to this disease in 1856, by Von Graefe; it is now looked upon as the only curative mode of treatment. Just how it cures nothing is known, and for that reason many have decried it. But the question arises, Are we to reject any operation or remedy which has been known to cure thousands, just because we have no finely spun theory in its favor? * * *

In the performance of the operation, it is highly important that the iris be entirely liberated from the corneal wound, and that it be excised well up to its ciliary margin. * * * * *

We can usually judge of the amount of benefit which we may expect from an iridectomy, in a few hours after the operation. If at our first dressing—nine hours after the operation—we find tension normal, or minus, and the chamber establish, we may look for a success; but, if on the other hand we find tension +, and the iris laying against the cornea, and that for several days; or if we notice what Von Graefe says about the “cystoid cicatrization,” then we can not flatter ourselves concerning the ultimate result.

We again have a very small class of cases, about two per cent., in which the iridectomy causes an increase of that process which we by the operation endeavor to cure. We sometimes also, have a hæmorrhage into the fundus of the eye immediately after the operation, this is also a bad symptom. * * * * *

Supplementary Iridectomy. In some cases, in a few months, and in others several years after the operation, the eye again becomes bad; in such it is better to make a second operation, and it should be diametrically opposite the first. * * * * *

It is a question whether the operation on one eye has a tendency to produce an attack in the other. Maren, Graefe, and others contended for the affirmative, while Arlt and others hold the negative side.

Von Graefe states, “that during the last two years of his practice, the glaucomatous attack was set up in the other eye within fourteen days after the operation, in rather more than thirty per cent.

Permit me to adduce a case which fell under my observation a few months ago, which bears on the last point as well as the one preceeding it. Indeed the case is almost unique:

Mrs. G., aet. 74, called upon me December 9, 1871, and stated that “she had been troubled with neuralgia in and around her right eye for nearly three years.” *

* * * "Had rushes of blood to the head, nausea and vomiting, and dimness of vision."

On inspection, the pupil was found to be dilated and immovable, anterior chamber very shallow, cornea hazy, and the lens slightly opaque at its posterior pole; eye very hard, tension $+2\frac{1}{2}$; field very much contracted on nasal side; acuteness of vision equaled simple perception of light; ophthalmoscopic appearance negative, owing to the opaque lens. The condition of her left eye was as follows: Iris curved a little forward; tension slightly greater than normal (T+); humors transparent; field normal; $S=\frac{20}{50}$ with $+\frac{1}{15}S$, or in other words, there was an hypermetropia of $\frac{1}{15}$, and her vision equaled $\frac{20}{50}$. The ophthalmoscope revealed a slight cupping of the optic disc, and nervous pulsation. She stated that the left eye never gave her any pain whatever.

We advised an immediate operation on the right eye, not with any view to the improvement of vision, but simply to relieve the tension, and by that means to remove all sources of irritation, so as to have a clear field when the operation was called for on the other eye.

December 11—Assisted by Dr. Kitchen of this city, a large iridectomy was made upward and outward, while the patient was under the influence of chloroform; the eye was then lightly bandaged, and again examined and dressed in about eight hours, when the tension was found to be minus (T—) and the anterior chamber well established. The operation relieved her almost immediately, and she was entirely free from pain until the 14th (three days), when she was attacked with another terrible paroxysm, with nausea, vomiting, and pain in and around the eye, not the right eye however, but in the one which had never before troubled her; her right eye was perfectly easy. Her vision became so dim that she could scarcely see her hand before her. The tension $=+2$, and the humors were very cloudy. Dr. Kitchen administered an hypodermic dose of morphia which gave her tem-

porary relief, and on the following day an iridectomy was made on the left eye, with the assistance of Dr. Kitchen, and Dr. Smith of Cleveland. The anterior chamber filled with blood immediately after the operation.

The tension was found to be reduced, the anterior chamber established, and the blood partially absorbed at the first dressing. On the fifth day she could see to read newspaper headings, in two weeks could read fine print, and at this date vision is better than before the operation.

No pain occurred in either since the operation until about two weeks ago, when the right or blind eye, again began to trouble her. The tension was found greater than normal, and it was deemed advisable to make an opposite iridectomy (supplimentary). This was done with the assistance of Dr. Newcomer and Dr. Kitchen. She is now doing well, with T—2. On examination of the left eye at this date, I find the fundus beautifully distinct, and no pulsation; tension —1. I fear no return of the difficulty.

REPORT OF A CASE.

BY J. B. ARMSTRONG, M. D., TERRE HAUTE, IND.

William S—, aet. 24 years, enlisted as a private soldier, was taken prisoner and kept in Andersonville, Ga., prison for twelve months, returned home, and on the 20th day of December, 1865, I was called to see him. He was greatly reduced in flesh, so much indeed as to be unable to walk alone; his mind, as well as body suffered, so that he was quite childish in his wants; there were numerous large ulcers over the body, those about hip joint and back were very deep and ugly, all the aggravated symptoms attending scorbutus were manifest; the teeth were loose, some had fallen out and left ulcers in the mouth, others with large pieces of alveolas decayed and came out. By a long continued course of treatment,

good diet and great care, he was sufficiently restored to health to resume his former occupation, that of engineer. I was again called to visit him about noon on the 10th of last December; found him with high febrile symptoms; he said he went to his work as usual that morning, but that about nine o'clock was attacked with heavy chill, said he had that morning taken two doses of quinine, as he had frequently during the past few weeks suffered from slight attacks of chills. On examination, I concluded I had a case of intermitting fever, attendant with engorgement of liver and some congestion of stomach, in a word I found all the symptoms of bilious derangement, and gave him hydrarg. submitis, gr. xv; ipicac, pulvis, gr. iij, made into four doses, ordered one to be taken every three hours, to be followed next morning early with a dose castor oil and ten drops turpentine; also left R, quinia sulph., gr. xx, made into five doses, ordered one to be given as soon as bowels were relieved, and one every one and a half hours until recurrence of the fever. Saw him again on the morning of the 11th, febril symptoms much less marked than on previous day, alvine evacuations dark green and copious, had vomited frequently during the night, each time throwing up large quantities of bilious matter, which seemed to relieve the heaviness or weight about the stomach, and of which he complained almost constantly during the night and morning, only as above stated, partially relieved by vomiting; continued the quinia as directed yesterday, and left him hydrarg. submitis, gr. xij; pulvis nitr. potass, gr. x; opii, gr. $\frac{1}{2}$, made into three doses, ordered one powder every four hours beginning at noon, with instructions to follow next morning with castor oil and turpentine, also R, quinia, sulph., as on day previous. On morning of 12th, I found my patient free from fever, castor oil had removed a large quantity of dark greenish matter, still complained of great heaviness in epigastric region, vomiting less frequent yet

nauseated; from time to time objected to sulph-quinia in powders, therefore ordered R, quinia sulph., gr. xxv; syr. acacia, ʒijʒ m. sig, a teaspoonful every two hours in absence of fever, enjoined rest, and wine with light nourishment. 13th, 14th, 15th and 16th, elicited no marked change for the better, ordered blister over stomach, as the weight and vomiting still existed, wine and quinia as often as stomach would retain it. About four o'clock on the morning of the 17th, patient vomited, and threw up quantities of blood, dark and clotted. Dr. Stone, an adjoining physician, was called in, and then I was sent for. I found patient very weak, restless, tongue dry and heavily coated, pulse full and sluggish, the blood vomited I thought came from the nose, and had been taken into the stomach during the night whilst sleeping; ordered mucilaginous drinks, the quinia syr. as above to be given as stomach would retain it, beef tea and wine from time to time. At four o'clock P. M., saw our patient, no perceptible improvement, ordered aqua calcis, ʒijj; morph. sulph., gr. ij; aqua minth, ʒim, tablespoonful to be given every one or two hours as recurrence of vomiting; continued quinia, wine, beef tea, etc. On morning 18th, patient had passed a very restless night, pulse more frequent and less full than previous; the epistaxis recurring from time to time, alvine evacuations regular, yet not profuse, same dark green colors very offensive; we now learned for first time that patient had not passed or voided urine since morning of 10th; an examination of region of bladder found that organ empty, an introduction of catheter revealed the same fact; there was no pain over regions of kidneys on pressure, nor in fact, had the patient complained of any uneasiness in the back during his entire illness; ordered diuretics at short intervals, mucilaginous drinks, warm fomentations to region of kidneys, quinia, and substituted gin punches instead of wine, also stimulating liniments over region of kidneys.

Saw patient frequently during the day, yet no change for the better. Morning of 19th, no urine followed the introduction of instrument; ordered blister plaster on kidneys. Patient slept some during night, yet we could now detect a slight urine, or, more properly, ammonia odor from the surface; the gums bled easily, the nose also bled from the slightest rubbing; continued diuretics, tonics and stimulants, as frequently as the stomach would retain them, found, on morning of 20th, our patient no better, although the withdrawing of catheter brought two or three drops of urine. The weight and heaviness in region of stomach more severely complained of; pulse more frequent and less voluminous than on day previous; face and eyes injected and painfully red, bleeding from nose and gums continues. At nine o'clock in evening called Dr. E. Reed as counsel, who after examining the patient, and learning the course of treatment given in the case, could make no new suggestions, as no remedies seemed to have any effect on the disease. The patient lingered during the night, and about four o'clock on the morning of 21st died, with all the symptoms of ureamia.

I have thus been particular in noting the symptoms, treatment and changes from day to day in this case, first believing them to be important, in the same ratio as the case is an important one, and secondly, that the practitioner who reads this may see and observe the error of omission, and yet it is an error, I am fully persuaded, we are all making, almost daily, who have many sick to visit, of course I allude to the long delay in ascertaining the actual condition of the kidneys and bladder. For I am fully persuaded, although unaccompanied by any symptoms to indicate that such was the case, that the primary disease was seated in the kidneys, and to the long confinement in prison, with its debilitating results upon the constitution, may be ascribed the remote cause of the disorganization of those organs. One fact is fully ex-

emphified in this case, and of which authors seem to differ somewhat—I allude to the length of time which may elapse before death ensues without any urine being eliminated; in this case we have a period of ten days and possibly longer. This fact, as well as the great interest of the case, is my apology for the great length of this article.

A CASE OF IDIOPATHIC TETANUS.*

BY D. W. BUTLER, M. D., DUNREITH, IND.

The subject of this report was quite an active intelligent boy, twelve years of age, has always enjoyed almost uninterrupted good health, well nourished and pretty well grown for one of his age.

While visiting the mother, November 23, 1871, by request my attention was called to this boy, who was sitting in a chair by the fire, and found the following symptoms present: Stiffness of the jaws, so that I could scarcely get handle of tea-spoon between front teeth, could protrude tongue only one-half inch; also stiffness and rigidity of muscles of neck. He thinks he noticed some stiffness of jaws since the 20th; has had a little fever for the last thirty-six hours; pulse 100, somewhat corded, temperature 101°; *risus sardonicus* well marked; some pain and tenderness over cervical and superior dorsal region of the spine; deglutition somewhat difficult, and on this account has taken but little nourishment for two days; tongue, what I could see of it, covered with a close white coat; bowels constipated; considerable thirst. A careful examination of my patient, from head to foot, failed to reveal any traumatic

*Read before the Mott Medical Society, at the January session, and by them referred to the Committee on Publication.

injury, and he stoutly denied having received any whatever; but had been much exposed recently to the inclement weather, with not very comfortable clothing.

Diagnosis, Idiopathic Tetanus—

Treatment—Ordered cathartic, composed of calomel, grs. vi, pod. grs. i, make two powders, give three hours apart, to be followed with sul. mag. if necessary, to move bowels; after which to have quinine, grs. iii, every three hours alternately with glts. iv, fld. ext. veratrum viride, with all the beef soup and cream he could be induced to swallow.

November 24, 8 A. M. Patient still sitting up; stiffness of muscles somewhat increased, involving to some extent those of the thorax; bowels acted well, otherwise but little change in symptoms, pulse 102, temperature 100°. Treatment—Quinine and nourishment continued, to have also hyd. chloral, grs. xv, every three hours, with a linament of chloroform and fld. ext. belladonna to spine, neck and jaws. 6 P. M. Can open mouth a little wider, protrudes tongue nearly one inch; pulse 96, temperature 98°, otherwise condition unchanged; continued treatment.

November 25, 9 A. M. Symptoms much aggravated; patient lying on the lounge, can not move without assistance; stiffness everywhere increasing; paroxysmal cramps of the muscles of the back and thorax, producing complete apostematous, during paroxysms touches the bed only with his hips and head, intense suffering during tetanic cramps, pulse 120, temperature 99°; muscles of deglutition much contracted, producing painful and difficult swallowing. Treatment—Continue quinine every four hours; as much nourishment as he could be forced to take; chloral hyd. grs. xx, every two hours; two oz. strong decoction of lobelia seed by enema every four hours; tobacco leaves, rung out of hot water, to be applied to epigastrium; continue liniment as before; patient perfectly rational. 6 P. M. Has slept some during

the afternoon ; paroxysms less frequent and not so severe ; pulse 112 ; swallows better, now calls for nourishment, says he is hungry ; can not sit up without support ; protrudes tongue three-quarter inches ; has vomited twice, probably from effects of lobelia and tobacco ; has taken in last nine hours 100 grs. chloral hyd., is sweating profusely ; continue treatment with chloral only when demanded to control spasm.

November 26, 8 A. M. Paroxysms still a little less frequent and less violent ; muscles of jaws less rigid, swallows better ; took 60 grs. chloral during the night, slept some ; head, which for two days had been drawn back, can now be slightly bent forward ; pulse 100, temperature 97° ; bowels constipated ; continue treatment with the addition of soap-suds and ten drops turpentine by injection, to move bowels. 1 P. M. Was hurriedly called to find a return of all the symptoms in a greatly aggravated form ; paroxysm returned with sudden and increased violence at 12 A. M. ; muscles not relaxing entirely at any time, but constantly agitating the suffering patient with violent and extremely painful jactitations ; pulse 122 ; skin cool, perspiring freely ; countenance somewhat livid and much increased during paroxysms, which in violence and horror I can compare only with those of eclampsia ; gave chloroform by inhalation until the muscles of deglutition were sufficiently relaxed to enable the patient to swallow, then gave at once hyd. chloral, grs. 40, and in two hours gave 20 grs. more ; and at 4 P. M., met in consultation Dr. Wm. B. McGavran, at which time from the effects of 60 grs. chloral and two oz. chloroform our patient was resting more quietly, and comparatively more comfortable, the paroxysms being less frequent and less violent. The treatment was continued with the addition of all the port wine patient could take ; chloral, grs. 20, every four hours, and chloroform by inhalation during severe spasm.

November 27, 8 A. M. Patient slept the entire night,

except when aroused to take medicine or nourishment, at which time he would have generally two or three light spasms; pulse from 96 to 116, the latter during tetanic cramps, soft and full while sleeping; less rigidity of jaws, protrudes tongue one inch, which is now clean; appetite good; bowels moved once during the night, urine which has been heretofore normal, is quite thick and turbid, showing very rapid destruction of tissue. Treatment—Quinine, grs. ii; g. camphor, grs. i; sul. morphia, grs. $5\frac{1}{3}$, every four hours, with wine and nourishment in increased quantities; patient begining to show marked symptoms of exhaustion. 7 P. M. Condition unchanged, except that spasms are a little more frequent and severe, and deglutition more difficult. Treatment—With the addition of chloroform, by inhalation, during tetanic cramps.

November 28, 9 A. M. Patient had a restless night, took four oz. chloroform; deglutition very difficult, producing a severe spasm when attempting to swallow, attributed by patient to dryness of throat; protrudes tongue $1\frac{1}{4}$ inches, which is very dry and red; passed no urine since day before, bladder full and complains of it hurting him, drew off one and half pints of highly colored urine with cathetic; took but little nourishment during the night, and less wine on account of the difficulty of swallowing; bowels full and slightly tympanitic, moved twice during the night involuntary; mind unclouded; pulse 110, temperature 97° . Treatment continued as far as practicable, with the addition of turpentine and lard to abdomen, and a discontinuance of the morphia and substituting again the hyd. chloral, in 20 gr. doses every four hours. Evening visit—Has taken during the day eighty gr. chloral, two oz. chloroform, one pint of wine, and an abundance of cream, soup and other nourishment; swallows much better, less dryness of mouth and throat, otherwise condition unchanged; continue treatment.

November 29, 10 A. M. Patient slept most of the night; took 20 grs. of chloral at nine, one, and five o'clock; urine again drawn with cathetic, obtained one pint highly colored, says he feels better; bowels not moved, less tympanitic; tongue moist, can protrude it almost full length; sleeps with mouth open; expression of face good except during spasm; trunk drawn backward except when asleep; pulse 96 and softer, temperature 98°; continue treatment. Evening visit, 7 P. M. Condition unchanged, ordered all treatment discontinued during the night except chloral, *pro. re. nata* to produce sleep, and chloroform to relax muscular contractions.

November 30, 8 A. M. Patient in a deep and apparently natural sleep, in which we left him, pulse 100, took during the night 80 grs. chloral and three oz. chloroform. 8 A. M. Has been unable to swallow anything during the day; slept most of the time, but when awake has a constant jerking, with the head and trunk thrown back, with an occasional severe convulsion, occurring about every two hours and just upon waking, and are now beginning to have a decided influence upon the heart's action, pulse just after convulsion not more than 40 beats per minute, and very feeble, friends thought patient dying many times during the day. Treatment—Ordered three grs. quinine and one oz. wine by enema, every four hours alternately with one oz. emulsion of g. asafœtida, in which there was previously dissolved 20 grs. hyd. chloral; one-half pint of urine drawn by catheter.

December 1. Passed the night free from convulsions, with only an occasional jerking; was awake frequently during the night, and talked freely and as intelligently as he ever did in his life; takes pleasure in showing me how wide he can open his mouth, can protrude tongue full length, but before I left the room, apparently without any new exciting cause, and without a moment's warning the little fellow was attacked with a convulsion, if possible more violent and horrible than any I had ever

seen him have before. From this time as long as he lived he was unable to swallow only a few drops of fluid at a time, and we were left the only alternative of doing what we could to sustain life with enemata of wine, quinine and beef essence, and depend on chloroform by inhalation to relax muscular spasm.

Despite our efforts the symptoms increased in severity, the tetanic spasms being confined principally to the muscles controlling respiration, until December 4, at 3 o'clock P. M., he breathed his last, dying of exhaustion, produced by the frequency and violence of the convulsions, which for the last thirty-six hours were fearfully violent and painful; patient retaining complete consciousness to the last.

The treatment may be summed up as follows: Externally—chloroform and belladonna to jaws, neck and spine, tobacco to epigastrium. Internally—chloroform by inhalation, cathartics, quinine, hydrate chloral, sul. morphia, lobelia, wine and an abundance of concentrated nutritious diet.

In this case was clearly demonstrated to my mind the superiority of hyd. chloral to morphia, or any other remedy used in controlling muscular spasm.

The most remarkable feature in the treatment to me, was the immense amount of hyd. chloral and chloroform the patient took to relax muscular spasms, having taken in ten days three oz. hyd. chloral (weighed), or 1,440 grs., an average of 144 grs. every 24 hours, and 16 oz. of chloroform by inhalation in five days.

Dr. Wm. B. McGavran visited the patient with me in consultation several times.

COMPOUND FRACTURE OF SKULL.

BY WARD COOK, M. D., PENDLETON, IND.

On the 10th of April, 1872, a little after dark I was requested to see Marcellus White, brakeman on the C. C. & I. Railway, who was then at the tavern in Pendleton. On enquiry I learned he had been struck by a stone on the head, thrown by some vicious scamp through the car window as he was sitting in the caboose, while the train was running through Alfont, a little village five miles south-east of this on the railroad. On examination I found a wound about an inch and a half in length, near the center of the os frontis vertically, but a little to the left of the median line, just over the part where phrenologists locate the organ of causality. The wound was transverse. Introducing my finger into it I found fracture with depression, in extent about equal to the wound, through the integument.

The general symptoms were those of concussion rather than compression; he was not comatose. There was no slow laboring pulse or stertorous breathing. He was conscious, with some irritability of stomach and vomiting. As the nature of the injury placed it under Sir A. Cooper's fourth head of cases, requiring the use of the trephine, viz: "Compound fracture with depression unattended with symptoms of compression," I determined to operate, but as it was now after dark I thought best to postpone the operation till morning.

Accordingly in the morning, in the presence of a number of medical gentlemen, and assisted by them, after having my patient put under the influence of chloroform, I proceeded to operate by making an incision through the integuments from the right extremity of the wound—to avoid the temporal artery—and at a little less than a right angle with it, upward to the top of the forehead, the flap of integuments, including the

pericranium, was then skinned back to make room for the crown of the trephine. A small trephine, half-inch in diameter was used; the pin was fixed as near as might be to the edge of the fracture, and on the upper side of it a small button of bone, say three-quarters of a circle, was removed; then three small detached fragments of bone were removed, and a depressed portion raised by the elevator. The dura mata appeared to be uninjured. The integuments were brought over and the wound closed by three simple sutures and adhesive plaster, leaving a corner open for the escape of discharge, a compress was applied and the operation finished. Afterwards his bowels were kept open with saline aperients, etc.; a damp cool cloth was kept on his head, and it and the bedstead at the head elevated. He was kept in a cool quiet room, and on light diet for ten days or more.

The incision and part of the wound healed by the adhesive inflammation. As soon as suppuration was established, the wound was dressed with simple cerate, and nothing else till it was healed. My patient being a young man of sound constitution and good health, recovered without an untoward symptom.

COUNTY MEDICAL SOCIETIES.

MR. EDITOR :—Permit me through the medium of your esteemed journal to say a word relative to Medical Societies, their uses and abuses.

It was always my opinion that the object of such associations was that the standard of medical knowledge might be elevated, that through the interchange of opinions and experiences good might result to the human family.

But I see in certain places that what, in my humble opinion, should be the prime object of these associations

is, in a measure, lost sight of in the anxiety of certain of its members to look after the financial interests of the profession. To illustrate my point, I will give an example:

Within a year a number of the physicians of the county in which I reside very properly agitated the question of an association, and a day was appointed, but the organization was scarcely perfected before it was found necessary to have a committee on FEE BILL, which, in due time, reported, and such a bill as it was! It was fun for the doctor, but death or starvation for the patient, for if a man was unfortunate enough to be sick and had the hardihood to call a physician, he must either have a fortune or immediately be reduced to beggary. But the worst feature of the proceedings was, it was adopted, but I am glad to state not without opposition.

Now, what must be the result of such legislation? It cannot be otherwise than injurious, in more ways than one.

1. It injures the business of the members of the association, as the people will not employ them if there is elsewhere to go; and that, with the large majority, is an item of importance. But there are a few old and influential members, who have already acquired a competence, that it suits exactly. They have become somewhat independent, and can live without patronage, if need be; but they have no fears of that, well knowing that their services will be in requisition by the wealthy part of community at least.

2. It is unjust to the profession. There are quite a number of physicians in every county who would be glad to have the benefits of the association, and would unite with it, feeling their need of knowledge to be gained there, but who remain away, preferring so to do to subscribing to something that cannot do otherwise than work to their injury financially, and who cannot see anything else than an arrangement for the "big fish to eat up the little ones."

3. It is unjust to the community. There are many who will suffer day after day with disease that might be arrested in half the time were they not deterred from employing a physician by the magnitude of his bills; and how many such cases run on till beyond the reach of aid, and go down to untimely graves.

4. It is a moral wrong—a legalized way of getting a man's money without an equivalent in return. You may think that a strong position, but I believe it to be tenable.

To illustrate: I treat neighbor A through an attack of sickness. In due time I present my bill and he refuses to settle it, claiming that it is too high. I resort to the law, and on trial I present evidence that it is not too high, as it is only the custom of the country, and he loses his cause. I dare not show him mercy if I would, as I have subscribed to the rules and regulations of the society, and I do not care to lose my standing with the profession. It is altogether a one-sided affair. All he has to do with it is to come down with the greenbacks like a little man. Again I say, I believe it to be all wrong.

PRACTITIONER.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, INDIANAPOLIS, IND.

RAPID DEVELOPMENT OF AN AURAL POLYPUS. — The rapidity with which aural polypi sometimes form is, to say the least, astonishing. It is not rare for the practitioner to find a growth of this kind in an ear, which a few days previously, had shown no evidence of its presence. A recent case in my practice convinces me that in only a short time, a few hours, may one be perfectly developed.

A boy, aet. 14, had been afflicted with otitis media several years ago, but no discharge from the ears had occurred for at least three years. About six months ago he consulted me, but treatment was not recommended.

April 19th, at 4 o'clock P. M., he came to my office, being annoyed by a herpetic eruption in left meatus, which gave rise to a slight discharge. Both membrana tympani gave the same appearance as at former examination—adhesions in various portions, and perforation below and behind handle of malleus in each. Owing to slight indigestion, an alkaline aperient was ordered, and a wash of two grains of sulphate of zinc to an ounce of distilled water was recommended for the ear.

At 9 o'clock on the following morning (20th) he again reported, complaining of itching, pain and discharge from the ear. On examination I found, to my astonishment a medium sized polypus, attached to the upper wall of the left meatus, about one-fourth of an inch from the auricle. The polypus, which was in this case attached more externally than any I have ever seen, was removed, the pedicle cauterized, the meatus painted with tincture of chloride of iron, and since then no trouble has been experienced.

ULCER OF CORNEA AND DENTAL ABSCESS.—A lady, forty years of age, in the cornea of whose right eye was an indolent round ulcer, had been the victim of violent paroxysms of toothache and neuralgic pains in right half of face and head, during the past fall and winter. Her eye had been more or less affected during all this time. She came concerning the ocular trouble on May 21. She remarked that she had observed an evident degree of "sympathy" between the eye and tooth, for both were better and worse together. After treating her eye for about a week with sulphate of atropia, one grain to one ounce of distilled water, a small quantity to be dropped

into the eye thrice daily, and observing no good effect following, I advised the patient to consult her dentist. Dr. P. G. C. Hunt was consulted, and extracted the first upper molar on right side, finding an abscess at the root. The same treatment of the eye was continued, and in about three days the eye was well.

I can not believe otherwise than that the diseased tooth in this instance, was, if not the immediate cause of the corneal ulcer, at least an active agent in prolonging its cure. Peripheral irritation of the trigeminus being either the cause, or preventing the healing process.

I have before reported a case of irritation of the eye, caused by a carious tooth, and Dr. Hunt has given me the details of a somewhat similar one coming under his own observation, where several diseased teeth either caused or were accompanied by some inflammatory condition of the eye of the corresponding side, which disappeared without treatment after the offending teeth had been extracted.

During the process of dentition in children, we frequently meet with herpetic troubles of the cornea and conjuction, and also nervous affections of the ear. Whether these troubles are caused by peripheral nervous irritation or mal-nutrition, should be, we think, a question for those interested in diseases of the nervous system, to decide.

Gleanings from Foreign Journals.

BY GUIDO BELL, M. D., INDIANAPOLIS.

Prof. Rothmund, speaking about itch-treatment, recommends besides older remedies:

1. Styrax, [two ounces to one of oil, or half ounce of alcohol and two drachms of oil].
2. Peruvian balsam, it kills the moth and its brood,

does not hurt the skin; children are bathed, dried and then 40 drops of balsam are rubbed in about four or five times within 24 hours. The scab-eczema has to be treated by soap-baths, a. i. f.; for grown people a little more than two drachms have to be rubbed in the dry skin at once. Peruvian balsam is the most agreeable and certain remedy.

3. Carbolic acid—it has to be mixed with glycerine or oil, [about a scruple to two ounces], if pruritus or prurigo is connected with it, carbolic acid must be given internally too. R. Acid carbolic, crystallis, 3.7 grammes; pulv. etext. liquir., 9 s.; m. 30 pills, s., one or two pills twice a day. Carbolic acid is easily resorbed through the skin, and becomes poisonous. Two cases of this kind, one lethal, are reported; the watery solution was one to eight parts; it seems to work more effectively dissolved in water, than with grease. R. prefers the carbolate of soda for children, [half ounce to two ounces of water] for external use thrice a day. The balsam and the carbolic salt don't require disinfection of the clothes nor rest in bed, if used again some days after.—*Memoral.*

Dr. Burkart says on the treatment of small pox: Therapeutics are necessary, if the fever becoms too high or if too large portions of the skin is destroyed. Xylol has no influence on the high temperature of the body, that is proved by experiments and at the bed-side; but xylol can not compensate for insufficient perspiration. Xylal has some good influence in severe case; at first, locally in the throat, so that nourishment can be taken, and then it abates bad smell. Septic small-pox is hopeless, although one of his cases got well after xylol-treatment. R. Xylol pur. 2.0 to 3.0 grammes; aq. fœniculy, vin. malacens, ana 60.0; syrup simpl. 30.0; ol. menth. pip. gtt., i s., a tablespoonful every two hours for grown people. R. Xylol pur. 0.5 to 1.0; ag. fœniculi, 30.0; vin. malacens, 60.0; syrup menth. pip., 30.0, s., a tea-

spoonful every one hour for children.—*Berlin Klin. Wochenseh.*

Dr. Kobner denies that syphilis can be diagnosed by microscopical examination of the blood, and shows Losterfer's mistakes.—*Ibid.*

In a case where some skin of an amputated arm was transplanted, small-pox occurred, the patient contracted this disease two days after the amputation.—*Ibid.*

The remedy in nasal catarrh mentioned in the last number is: Of the purest carbolic acid 5.0; of the purest alcohol, 15.0; of caustic ammonia, 5.0; [of the specific weight 0.960] of pure water, 10.0; in a dark vial with a glass stopper.—*Ibid.*

Prof. D. H. Yandell, of Louisville, said in his speech before the American Medical Association: But the practice of physic in Germany at this time, is it much more than a meditation on death?

This opinion ought to be corrected. History mentions great physicians of every century from the earliest days. But the hypocritic method was always found true; *medicinæ studium a sapientia reparavit*. Stahl taught, disease originates from the soul, that being in disorder; another school refers it to bad blood, a. s. f.; nevertheless the true practitioners' field of study was always at the bed-side, and the principle, *curare, non nocere* was kept up.

At the commencement of our century, Cruveilhier and Lænnec explained disease originally, and showed how to understand it in the living body. The achievement of the doctrine of organic disease is due to Rokitansky and Skoda, the founders of the new school of Vienna. It is true, some thirty years passed, many young practitioners, surprised by the anatomical facts, and overlooking how or where they came from, have abandoned for some time nearly all medical practice. But Oppolser, the physician par excellence, was opposed to

that from the beginning; his method of practicing was that of old Hippocrates. The Berlin school is leading in surgery, and Oppolser in practice of physic, for more than twenty years.

Chemistry, physic, botany, microscopy, etc., have enlightened medical science and emancipated it in a high degree. To endeavor mental independency of the medical practitioner, and to open the wide field of medical practice in an equal rate to all, the old way of diagnosing by a practical view was given up, and the sure way of conviction looked after. The students of medicine had to learn all branches of natural philosophy, but became overloaded afterwhile by too many details; nevertheless general education is good. German medical practice is not mere nihilism, but sound criticism.

Proceedings of Societies.

NORTHEAST INDIANA MEDICAL SOCIETY.

The Society met at Kendallville, on Tuesday, June 4th, at 10 o'clock A. M.

The meeting was called to order by Dr. Dancer, (one of the Vice Presidents,) the President not having arrived.

The proceedings of the last meeting were read and accepted.

The Censors reported the following names for membership: J. A. Cowan, of Auburn, and J. W. Hays, of Albion. The report was received, and the candidates for membership were elected. Dr. N. S. Davis, of Chicago, was elected an honorary member.

The election of officers for the ensuing year was declared in order. Dr. Teal moved that the election be by ballot instead of adopting a report by the committee on

nominations, as customary. Dr. E. G. White amended the motion that the committee on nominations be instructed to report two candidates for each office, which was carried. The Chair appointed Drs. Erickson, Cowan, C. A. White, E. G. White and Wood, to nominate officers in accordance with the motion just adopted. The result of the election was as follows:

President, J. Dancer, of South Milford; Vice Presidents, J. Cowan, E. G. White, T. McNabb and G. W. Carr; Recording Secretary, J. L. Gilbert; Corresponding Secretary, C. A. White; Treasurer, L. F. Abell; Censors, H. D. Wood, D. W. C. Denny, W. Hughs, N. Teal and J. N. Chamberlain.

The finance committee, consisting of Drs. Landon, Erickson and Teal, submitted the Treasurer's annual report, and recommended that an extra tax of one dollar be levied on each member to defray the expenses of the Society, and that each delinquent member be dropped who fails to respond after being duly notified by the Secretary. The recommendations were adopted.

Reporting cases was next in order. Dr. Teal reported a case of exostosis of the fangs of a tooth; also a case of re-section of the shoulder joint, which he had made during the war. Dr. Denny reported a case of epilepsy, which was partially relieved after removing a depressed portion of bone with the trephine. Dr. Tucker presented a patient for examination.—Some years ago a growth presented itself over the inferior angle of the scapula. Dr. Latta pronounced it of a cheloid character, and recommended its removal by the knife. The removed portion to include healthy tissue sufficiently to insure the complete extirpation of the diseased growth.

Dr. Wood reported a case of compound comminuted fracture of the tibia and fibula which he had treated in the usual way—splinting, etc. The patient did well for a week, when there was a necrosis of the ends of the fractured bones. About eight hours after this was ob-

served, the patient died suddenly. There was no post mortem examination, and the immediate cause of death remains a mystery. The case excited much interest and elicited a diversity of opinions concerning the cause of sudden death.

The following resolution was offered by Dr. Teal, and unanimously adopted by the Society :

Resolved, That in the opinion of the members of this association, Dr. Wood's treatment as reported of the case just cited, was strictly in accordance with the principles and practice of modern surgery.

Dr. Latta spoke at length upon the resolution. He approved the treatment, and in the course of his remarks took occasion to condemn the fracture box, comparing it to the instruments of torture in vogue during Spanish inquisition.

Dr. Erickson reported a case of compound comminuted fracture of the tibia, with extensive laceration of the muscles. He amputated the leg at the right knee joint. The patient's prospects for recovery are good. The doctor reviewed the history of knee joint amputations, and compared them with amputations of the femur, at the lowest possible point. He showed conclusively that (according to statistics) the chances of recovery were strongly in favor of Malgaigne's operation at the knee joint. Other cases were reported by Drs. Dancer, Spooner and others.

The next meeting will be held at Auburn, on the first Monday in September. The subject for discussion at the next meeting will be Anæsthetics. Drs. Denny and Gilbert were appointed essayists for the next meeting. Dr. Woodworth, of Fort Wayne, will deliver the address.

At six o'clock the Society adjourned to meet at Mitchell Hall at eight o'clock, when Dr. N. S. Davis delivered an address to a large audience. The singing by the Philharmonic Society was very fine, and added materially to the interest of the occasion. J. L. GILBERT, Sec'y.

MOTT MEDICAL SOCIETY.

KNIGHTSTOWN, February 1, 1872.

The Society met in Dr. McGavran's office, at one o'clock, P. M.

Members present, Dr. N. H. Canaday, President; Dr. E. I. Judkins, Secretary, and Drs. Butler, Adams, McGavran and Sparks; visiting, Drs. Wishard and Wagoner.

Minutes of last meeting read and approved.

Applications of M. M. Wishard and R. A. Smith, to become members of this Society, were read and referred to the committee on membership.

Upon motion Dr. Wishard was invited to participate in the proceedings to-day.

Dr. McGavran read a paper reporting an anomalous case of severe pain in arm and head, of a young lady aet. 20, of healthy parentage, good physical constitution, and otherwise in good health. Said pain not tracable to spinal nor uterine disease, resisting a thorough course of anodynes, tonics, etc., but yielding only to venisection, with return again in a few weeks, which again resisted all remedies, except bleeding.

The case was discussed at some length by all present. Some calling it hysteria, and recommended hysterical treatment, others believe it embolia, while some believe it to be the result of some apparently obscure spinal disease.

Various other subjects were discussed until the hour of adjournment, when the Society adjourned to meet in Greenfield, on the first Thursday in March next.

E. I. JUDKINS, Secretary.

Reviews.

AURAL CATARRH; OR, THE COMMONEST KINDS OF DEAFNESS AND THEIR CURE. By Peter Allen, M. D., London, England. Wm. Wood & Co. New York. 1872. pp. 277. For sale by Cathcart & Cleland, Indianapolis.

The author of this neat little work does not pretend that it is an exhaustive treatise upon the subject, but comprehending as he does that catarrhal affections of the middle ear are the causes of the great majority of cases of deafness, he hopes that careful perusal of his book may teach the reader *how to examine, what to look for, and where to find the disease.*

We can agree to nearly all that is contained in this volume, excepting only a few matters of minor importance. Perhaps a little too much prominence is given to the author's modification of Politzer's air bag, the valve being an improvement, but the double nasal pad we think of disadvantage.

Dr. Allen believes, and correctly, too, that physicians in general practice should qualify themselves to treat aural diseases, and his work is therefore not merely an advertising dodge, but an earnest effort to simplify, and not a quackish mystification of the subject. The fact that the work is a republication by that sterling firm, Wm. Wood & Co., of New York, will of course be considered as one proof of its excellence, but we must regret that the wood cuts were not more properly executed.

We can heartily commend this little volume on account of its simplicity of style and completeness of detail.

C. E. W.

The following books are for sale by R. W. Cathcart & Cleland, Indianapolis :

CLINICAL LECTURES ON THE DISEASES OF WOMEN. By Sir James Y. Simpson, Bart., M. D., D. C. S., late Professor of Midwifery in the University of Edinburg. Edited by Allen R. Simpson,

M. D., Professor of Medicine and Midwifery, etc. New York: Appleton & Co., 549 and 551 Broadway. 1872.

A TREATISE ON DISEASE OF THE BONES. By Thomas M. Mar-
kal, M. D., Professor of Surgery in the College of Physicians and
Surgeons of the New York Hospital, Surgeon of Bellevue Hospital,
etc. New York: D. Appleton & Co., 549 and 551 Broadway.

THE PHYSIOLOGICAL AND THERAPEUTICAL ACTION of the
Bronchide of Potassium and Bromide of Ammonium, in two parts.
By Edward H. Clarke, M. D., and Robert Amory, M. D. Boston:
James Campbell, 18 Tremont street.

MIND AND MATTER; or, Physiological inquiries, in a series of Es-
says intended to illustrate the mutual relation of the physical organi-
zation and the mental faculties. By Sir Benjamin Brodie, Bart., D.
C. T., Vice President of the Royal Society; with additional Notes by
an American editor. New York: Samuel & William Wood, 389
Broadway. 1859.

THE TREATMENT OF VENEREAL DISEASES. A monograph on
the method pursued in the Vienna Hospital, under the direction Prof.
Von Sigmund, including all the formula. By M. H. Henry, M. D.,
Surgeon of the New York Dispensary, etc. New York: Wm. Wood
& Co. 1872.

INSANITY AND INSANE ASYLUMS. Report of E. T. Milkins, M.
D., Commissioner in Lunacy for the State of California, made to his
excellency, H. H. Haught, Governor, December 2, 1871. J. A.
Springer, publisher.

**A TREATISE ON THE DISEASES OF INFANCY AND CHILD-
HOOD.** Second edition, enlarged and thoroughly revised, by J.
Lewis Smith, M. D. Philadelphia: H. C. Lea. A standard work
that leaves little to be desired.

Forty-sixth Annual Report of the Massachusetts Charitable Eye and
Ear Infirmary, February, 1872. J. Campbell, 18 Tremont street,
Boston.

Twenty-third Annual Report of the Indiana Hospital for the Insane,
for the year ending October 31, 1871. P. H. Jameson, M. D., J. H.
Woodburn, M. D., J. M. Caldwell, Commissioners. Orpheus Everts,
Superintendent.

PRESENT STATE OF ELECTRO-THERAPEUTICS. By A. D.
Rockwell, M. D., Louisville, Ky. Reprinted from the "American
Practitioner," of May, 1872.

Transactions of the Kansas State Medical Society for the year 1872.
A volume of sixty-six pages, containing some good articles.

The North Western Farmer, edited by J. G. Kingsbury, Indianapolis.
Proceedings of the Homeopathic Medical Society of Ohio.

No. 4 of "Half-Hours Recreation in Popular Science"—Spectrum Analysis Discoveries, showing its application in microscopical research, and to the discoveries of the physical constituents and movements of the heavenly bodies. From the works of Schiller, Young, Roscoe, Lockyer, Huggins and others. Boston: Lee & Shepard. Price, 25 cents.

Minutes of the Twenty-Fifth Annual Meeting of the American Medical Association, held in the city of Philadelphia May 7th, 8th, 9th and 10th, 1872. Philadelphia: W. B. Atkinson, M. D., 1400 Pine street. Price, 50 cents.

Medical College of Evansville—annual announcement, session of 1872-73.

The Seventeenth Annual Announcement of the Pennsylvania College of Dental Surgery, 1872-73.

A Plea for the Antiphlogistic Treatment of Disease. Edward Montgomery, M. D., St. Louis.

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of county practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

THE subject of chemico-legal investigations is an all important one, not only because of its great intrinsic value, but also in view of the knowledge of minutia and nice manipulations involved. Experience, which is cumulative, brings to light in nearly every case brought to our notice, in which such examinations have entered, the fact that even those who have an average chemical knowledge, and are above, it may be, the average of general practitioners as regards skill and knowledge with reference to subjects generally, still, for some reason, do not bear the test when called upon to perform an analysis. This, we say, not wishing to detract from general practitioners, nor yet from amateurs in chemical knowl-

edge, for the best chemists, those even who stand at the head of the column, find their need of most minute investigation, careful manipulation, and the utmost diligence so that mistakes may be prevented and a right conclusion arrived at. The truth of the above applies more particularly to chemico-legal, than chemico-medical inquiries; for of the latter there are many points of interest to the student and patient, enquiring practitioner, and much that even he, busied with the cares of a large practice, can and ought to make himself familiar with. Much of the chemistry and microscopy of urology of various morbid growths and pathological productions, simple tests for the detection of adulteration of medicinal substances, etc., should be studied by every physician—it should not only be considered a pastime but a necessity.

But even here, in the domain of chemico-medical inquiries, we doubt but that there is a large field that never will be worked over by the general practitioner. First—Implements are necessary. Some cannot, more will not procure them. Others, having them, use them spasmodically for a while, then cast them aside, weary in well-doing; and others, say what you will, ignore them in toto. Of these, the second class are the most benighted. They have a partial assortment of instruments—test-tubes and spirit lamp, with glass bottle are found stored away in their offices; and a smattering knowledge of their use in their brains, and with this a self-conceit that ruins everything, they undertake that which they cannot perform, and either work for nought, or worse, pronounce their faulty results as true, and grossly mislead others, if not themselves. Far better had they been contented to remain with the other two classes, viz.: having nothing to work with, or no inclination to act.

It is well, then, to know what we may all undertake with a fair prospect of obtaining safe results, and ena-

bling us to form correct conclusions ; and what we may well shun, unless we are fully prepared, and intend to devote ourselves to it, with that diligence that will command success ; for here, as in many other departments of medical science, there is an amateur as well as a thorough and practical knowledge. The one is not to be refused or ignored—the other is alone to be trusted in elucidating difficult points.

THE Academy of Medicine of Indianapolis, by furnishing us reports of proceedings, has found the right path. “May they walk therein and not grow weary.” We are glad to know the members are disposed to assist and benefit themselves. May they be a benefit to the profession at large.

THOSE who receive Journal with an X upon the cover may consider it acknowledgment of money received as per bill sent.

UPON the 1st of May, 1873, we propose to enlarge our Journal to double capacity and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers :

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, &c.

THE minutes of the late session of the American Medical Association are now in press, and will shortly be issued in pamphlet form. Those wishing to subscribe will address Wm. B. Atkinson, Philadelphia, Permanent Secretary. Price 50 cents.

THE annual announcement of the St. Paul School of Medical Instructions for 1872 has been received. Alex.

T. Stone, M. D., St. Paul, Minn. The object of which is said "to prepare the student for a better understanding of the lectures which they will hear in the college course."

FOR SALE—A medical practice worth from \$1,500 to \$2,000, in a pleasant village, with small but comfortable house, three lots, good outbuildings, also ten acres of land planted in fruit trees, apple and peach, not yet bearing. Terms—All taken together, \$1,600, \$1,000 in cash, balance in one, two and three years. No other physician in six miles. Apply immediately, with stamp if answer is desired. A small drug store for sale in connection with the above, if desired. Address, Snodgrass & Dodds, Real Estate Agents, Bloomington, Indiana. Or, Physician, White Hall, Owen county, Indiana.

RUSH MEDICAL COLLEGE.—The thirtieth Annual Course of Lectures will commence on Wednesday, the 2d of October, 1872, and continue twenty weeks. Students are admitted to Cook County Hospital, St. Luke's Hospital, Eye and Ear Infirmary, and College Clinics.

Fees.—Lectures, \$55.00; Matriculation, \$5.00; Dissection, \$5.00; Hospital, \$5.00; Graduation, \$25.00. For any information with reference to the College, address the Secretary, Dr. DeLaskie Miller, No. 926 Wabash Avenue, Chicago.

July 3 t

REPORT OF AUTOPSIES MADE AT CITY HOSPITAL, INDIANAPOLIS.

BY THAD. M. STEVENS, M. D., PATHOLOGIST..

Section by Drs. Marsee and Tomlinson.

JENNY HOMAN, aged 18, admitted December 30th, 1871, autopsy April 22d, 1872.

Diagnosis—Pelvic abscess with phthisic pulmonalis,

resultant of rubeola. External appearance: Very great emaciation, bed sores on both hips and sacrum; adhesions of plura upon both right and left sides. Lungs: Numerous abscesses in both, with caseous deposits thickly deceminated. Pelvis: Uterus rather small, pushed to left side; peritoneum, including the *cul de sac*, normal; extensive impactation of rectum, with hardened fœces; abscess upon either side of rectum, communicating internally by a passage between rectum and vagina, but not communicating posterially; walls of abscess between the perinæum extending up two and a half inches, that upon left side opening into rectum immediately above the sphincter ani; upon right a similar opening at superior apex of the cavity of abscess; an orifice external in the perinæum upon either side of anus, communicating with abscess, about one inch from sphincter ani.

CLARISSA BRIGHT (colored). Thorax and abdomen examined. Lungs: Large amount of pigment; otherwise normal; bronchial glands enlarged, especially near bifurcation; a cordon of enlarged glands surrounded the duodenum. Uterus: Endometritis present. Kidneys: Right enlarged, and softened; numerous abscesses, some opening externally, others into the pelvis of the kidney; left kidney enlarged and congested.

R. W—. External appearance: Large abscess on left side of thorax, extending from vertebral column to within two inches of sternum, and from border of sixth rib to axilla and middle of scapula; had been opened. Upon section of skin and subcutaneous tissue a large amount of grumous pus escaped; walls of abscess bleeding upon slight touch of knife handle. No communication with any arterial trunk found.

Spleen. Normal in consistency; contracted to the size of an unhulled walnut; lungs filled with a puriform fluid. Heart: Normal; clots in both venericle and auricle;

venacava, coronary veins, and indeed all the vessels poured forth upon section a light yellow gelatinous puriform fluid; a well marked example of blood changing into pus, resultant of absorption from a large abscess.

MORRIS DUNNING. April 27, 1872. External appearance eighteen hours after death: Cadaveric rigidity slight; warmth of body not entirely dissipated; enlarged thyroid gland, weighing eleven ounces; left side, length three inches, same in breadth; right, length five inches, width three; isthmus enlarged; from external posterior points of gland from side to side eight inches; lungs and heart normal; adhesion of plura costalis and pulmonalis of both sides; those of right over entire extent and firm.

Spleen: Size normal, breaking down upon slight pressure, or even handling; gall bladder distended with ten ounces of normal bile, and containing about thirty gall stones, varying in size from half a pea to a marble, with numerous facets upon each.

Brain: Left hemisphere normal; right, laceration and almost entire destruction of right cerebrum; large cavity filled with blood partially coagulated.

Symptoms before death: Attacked suddenly with loss of consciousness; paralysis of motion of left arm and leg; continued in this condition, except a partial return to consciousness, until death.

Miscellaneous.

THE CÆSAREAN OPERATION IN THE UNITED STATES.—* *
* * 1827, April 23d, Newton, Ohio. Dr. John L. Richmond, operator. Miss E. C., a large fat woman, under care of two midwives, (in an open log cabin, then on the frontier of civilization,) for thirty hours, and affected with eclampsia. No os uteri could be felt, as the ante-

rior wall of the vagina appeared to cover the cervix, and form an acute angle with the posterior wall in the hollow of the sacrum. After attempting, in vain, for hours, to check the convulsions, and ascertain the presentation of the child, Dr. Richmond, without any assistance, and by means of the instruments in his pocket case performed gastro-hysterotomy, cutting through the placenta in so doing. Not being able to turn the child, which was a very large one, and presented its back to the incision, with its head in the pelvis, he cut it across the loins so as to double it up, and extracted it. No communication with the vagina could be found from within the os uteri. The abdominal wound was left open for two inches at its lower end, until the seventh day, that the lochial discharge might escape, when it was closed, but was again opened on the twelfth, for the discharge of accumulated offensive sanious matter, and kept open six days longer, being syringed out each day through a catheter, with a pint of warm soap-water. Woman never had any pain, commenced work in twenty days, and in the fifth week walked a mile and back on the same day.—*Western Jour. Med. and Phys. Sci.*, vol. 3, 1830, p. 485.

N. B.—Although but forty-four years ago, this, as far as I have been able to ascertain, after an extensive and laborious search, is the oldest *published* case of the Cæsa-rean operation by an American operator. Dr. Fleetwood Churchill reports the child as “alive,” which is clearly an error, as is also his crediting the first case in this record, to “Mr. Cullen, of New York.”—*Harris on Cæsa-rean Operation in the U. S., in Amer. Jour. of Obstetrics*.

[Dr. Richmond, soon after the above date, became a resident of Indianapolis, where he held a high position among the early practitioners of medicine. We were under the same impression with Churchill, to-wit, that the child lived.—EDITOR.]

SPONTANEOUS GENERATION.—The controversy concern-

ing the possibility of the development of low forms of organic life from inorganic matter still continues. Volumes have been written on the subject, and many more will doubtless be written before the contest comes to an end. "The issue of the question," as the *Christian Union* remarks, "has no direct bearing upon theology. Christian philosophers are too enlightened now to accuse the microscopist or chemist of atheism and blasphemous ambition to become a creator, because he watches the conditions of the activity in nature of the Power which we believe to be divine. This absurd denunciation has been indulged; but we have grown wiser in regard to the true spirit of science. If certain inorganic matters brought together under certain conditions will give rise to life, the experimenter who brings them together is no more a creator of life than if he introduced organic germs to produce it. In both cases he is merely an observer."

It is a curious fact, by the by, that when Redi, in the seventeenth century, promulgated the doctrine that life can only proceed from life (*omne vivum ex vivo*), he was accused of contradicting the Scriptures, which asserted that bees were generated from the body of a dead lion.

Our readers may thank us for defining some of the polysyllabic names by which the various theories on this subject are known. *Biogenesis* is the general term for the production of life from life; it includes *homogenesis*, or the reproduction of similar forms, *xenogenesis*, or the generation of something foreign and permanently different from the parent form, and *heterogenesis*, which is properly the same as the foregoing, but has been used to denote the different kinds of young. *Abiogenesis*, or the origin of life without antecedent life, is the better term for "spontaneous generation." Dr. Bastian employs for the assumed originating *de novo* of certain monads the term *archebiosis*.—*Boston Jour. of Chem.*

HEAT AS A POISON.—It appears from some curious experiments of M. Claude Bernard, that heat, when it attains too high a degree, acts on animals like poison, and destroys feeling and motion. The precise action of heat on the blood, according to M. C. B., is as follows: the blood of an animal killed by heat becomes black, the oxygen it contains is rapidly transformed into carbonic acid, and finally disappears. This is not a true toxical action, but rather an excitement of the vital and normal properties of the red particles. The black blood of the rabbit killed by heat is still living; it absorbs oxygen by contact with the air, and again becomes ruddy, if the experiment is tried in time. Between 167° and 190° F., however, the blood coagulates, loses its vital properties, and cannot again become red. Heat above a certain degree kills the muscles without killing the blood. The chemical character of this poisoning of the muscles by heat is the most obscure part of the subject. It now remains for chemists to analyze the phenomena which accompany the muscular rigidity and cessation of motion produced by heat, and thus to solve the problem of the precise action of this poison, as they have done in the case of certain others.—*Philadelphia Med. News*.—*Chi. Med. Jour.*

IVY POISONING.—Mr. H. Markham, of Port Jefferson, N.Y., sends the following note to the *Scientific American*:

“I send you a prescription which, I am satisfied, from ten years’ experience, is the very best remedy for ivy poisoning. It is simply to bathe the parts affected with *spirit of nitre*. If the blisters be broken, so as to allow the nitre to penetrate the cuticle, more than a single application is rarely necessary, and even where it is applied to the surface of the skin three or four times during the day, there is rarely a trace of the poison left the next morning.”—*Druggists’ Circular*.—*Chi. Med. Jour.*

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No. 4.

Original Communications.

SCIENTIFIC MEDICINE AND QUACKERY.*

BY P. H. JAMESON, M. D., INDIANAPOLIS.

We propose to consider for a short time the relations of Scientific Medicine and Quackery. Looking at the subject mainly in a therapeutical or practical sense, we shall assume scientific medicine to be the intelligent application of prophylactic or remedial agencies of known and definite properties, to the prevention, mitigation or cure of disease. Accordingly, the strictly scientific practitioner, having made a correct diagnosis, applies to a pathological condition a known remedy; and, so far as this is done, medicine may justly be regarded as a science, but no further. Hence it follows conversely, that all other modes of practice, as the empirical, expectant, and that which is done by mere routine—all guessing at the disease first, and then at the remedy—may be justly classed as quackery. Any other classification would seem arbitrary and unphilosophical.

*Read before the Indianapolis Academy of Medicine.

Quackery has, so far as we know, always existed. In the days of Hippocrates the charlatan offered his nostrums in the market places of the cities of Greece; and to-day, on one of our street corners may be seen the "Joyful Oil" man in the same business. Whether or not, like the tares with the wheat, it shall grow with scientific medicine till the end of the world, or shall be rooted up by the increase of knowledge and the advance of the healing art towards perfection, is more than human reason can determine.

Our immediate predecessors in medical practice had as much quackery to contend with as we have now. In this connection, and for the sake of calling up the memory of two worthy departed members of the profession, the friends of many of us, and who should not be soon forgotten, you will pardon a reference to the organization of the first Medical Society of the State.

Some years ago Dr. Pabody, of Vernon, Ind., presented us with an interesting, if not singular document, dated in the year 1823—the year before our *entre* into this mundane sphere. This document, grown yellow with age, and printed on coarse linen paper, in ancient italic letters, sets forth that Dr. Ezra Pabody was a member in good standing of the Indiana State Medical Society, just established. None who knew him will doubt that he was well qualified, and most worthy to be a member of this or any society where intelligence, morality and the other essential characteristics of the gentleman and physician were the tests of membership.

An interesting feature of this certificate is the name of the late Dr. Livingston Dunlap, our much esteemed and lamented fellow townsman, countersigned as secretary. This beautiful signature is quite characteristic, and almost identical in appearance with that of more than forty years subsequent date. We were naively informed by Dr. Pabody, that the chief object of this society was to put down quackery. The Indian doctor

was then abroad, and though the pale face had driven him from his native forests, and already laid deep in his soil the foundation of a higher civilization, still he found favor with the early pioneer as a dispenser in the healing art. Although frequently coming in the form of a caucasian or negro, claiming to have learned his art while a sort of a renegade, his roots and herbs were often preferred to the calomel and lancet of the disciple of Broussais and Rush, and the result of his practice highly extolled. Simultaneously appeared the "Narrative" and other writings of Samuel Thompson, constituting two small volumes about the size of "Webster's spelling book." These works, silly and puerile in the extreme, announced the startling theory that Heat was Life, and Cold was Death. And another, if possible, more absurd than the first, that vegetables growing from and out of the earth, tended to keep man out of the grave, while minerals, being properly a part of the earth, tended to draw him into it. This sapient declaration of principles, with the appropriation of cayenne, lobelia and the vapor bath, as a trinity of remedies sufficient for all ailments, seems to have been the distinguishing feature of this singular system, if system it might be called. As you all know, his followers were not a few. Added to these were the Charm doctor, Faith doctor, Blood Stopper, Writer of Mad-dog tickets and the Witch doctor, the latter since made famous by Prof. Christie in the very clever satire of "Billy McConnell." Fifty years ago this motley crew of charlatans, with one accord, acting as much from common interest as sympathy, joined in the ever sounding clamor against regular physicians.

Since the organization of this society more than a generation has passed, and other actors, with shifted scenes, are now before us on the stage of human life. Pabody and Dunlap have both gone "to the pale realms of shade" to take "each his chamber in the silent halls

of death." But when casting off his armor, at the end of his life-long contest for scientific medicine, was either conscious that any material progress had been made toward the attainment of the end for which the State Society had been organized—namely, the putting down of quackery? Not at all. But they left quackery in its protean forms, as much in the ascendant as ever, and very perversely refusing either to die, be killed, or even sleep for a season.

Assuming, as we did at first, that quackery embraces, without distinction of sect, all practice not based on scientific principles, we fear it will be found much nearer than among the disciples of Hahnemann, Beach or Priessnitz. Medicine, as most advanced, is often very uncertain in its results. Many diseases are obscure in their nature, and difficult in their diagnosis, often misleading the most skillful. Among the countless varieties of remedies in use, the definite properties and actions of few are well understood. It is no uncommon thing for the most learned of the profession to differ and dispute about the qualities of agents in most general use, as for instance, quinine or calomel; while no two fully agree as to the therapeutical application of any thing. Adding to these difficulties the limited abilities and knowledge of many practitioners of legitimate medicine, *what* is more probable than that much of even the so called regular practice should be unscientific? Nor should we fail to see in these facts much of the true cause of the success of quackery. Medicine, as practiced by many claiming to be its representatives, differs widely from medicine as expounded by our best writers and teachers. In continuation we shall consider the practitioner in his true relations to the public, in doing which we shall glance at his peculiar modes of thought and action, and some of the characteristics by which he may be estimated.

The practitioner of to-day, he who gives tone and character to the profession, so far as the public can esti-

mate it, was the student of twenty years ago. Those preceding and following him have each their influence, but he may be taken as justly embodying the average. Those in attendance on the schools at the time named were divisible into three classes: the lower quite ignorant though very few in number, the middle embracing the larger proportion, say four-fifths, and the upper, a select class consisting of the well educated and accomplished. As illustrating the lower class, we remember when attending lectures, having formed a boarding-house acquaintance with a student of an older and rival school. He was a scion of an established and highly respectable family of the Old Dominion; he was passable in appearance and address, but very immoral; in point of intellect only a small remove above an idiot, so far as one knowing him could judge. He could understandingly neither read, talk or think on any scientific subject. He could not have told the difference between the solar system and the *plantar fascia*, not having the remotest idea of either. He was in his third course of lectures, and both himself and parents anxious he should graduate. On the first examination he failed, but so ardent a wooer of science was not to be thus summarily bluffed. By some unknown device he secured a re-examination and was passed, and this under the auspices of the oldest and proudest school in America. Happily for the profession there were very few of this class. And, no thanks to the givers of the diploma, the common sense of mankind is generally sufficient to protect society from such stupid impostors, who sooner or later slough off from the profession like so many lifeless excrescences. But is it not amazing that the names of such celebrities as Chapman, Gibson, Hodge and Wood, should be found appended to the diploma of such a character! If dishonest pretense is quackery, by what more appropriate name can we designate the sending forth of such a simpleton, as an accredited exponent of scientific

medicine? How cruelly is medicine thus wounded in the house of its friends, by those who, having received its richest rewards, should be most jealous of its honor.

Ascending the scale we shall next consider the middle class, proportionately very large, comprising probably four-fifths of the students of twenty years ago, and a corresponding ratio of the practitioners of the present time; and, if we may so speak, presenting the main points of contact between the profession and those without. It may be safely assumed that public opinion relating to practical medicine, is mainly based upon an estimate of this class.

This middle class of students was in general quite good looking and orderly, composed of the young farmer not long from the plough; the aspiring pedagogue, who had but yesterday laid down the birch, and deserted the log school-house, hoping to find more lucrative or congenial employment; the son of the thrifty mechanic or merchant, whose impatience had driven him to the lecture room, when he should have remained in the academy or literary college; and finally, the mediocre, who having dragged through college at the foot of his classes, was seeking a refuge in medicine, as a last resort among the learned professions.

A fair proportion of these were naturally well endowed, but being without proper mental training, their modes of thought and study presented many peculiarities and defects. Be that as it might, after paying for and attending two courses of lectures, and paying the graduation fee, they all, good, bad or indifferent, received the degree, and the diploma was duly delivered upon the further payment of five dollars to the janitor. We never knew a failure when these conditions were complied with. Of course there was an examination, but among this middle class the only failure we remember to have heard of, was when the fees were not forthcoming.

Immediately after commencement exercises, each, di-

ploma in hand, sallied forth to practice medicine. To follow them in their long, anxious, and often fruitless struggles to obtain a business, and thereby bread and butter, is not our purpose. It is only too true that he who depended solely upon attainments and merits often failed, while the shrewd outside manager succeeded. But what mainly concerns us, is the manner in which those who were successful have since practiced. This manner has much to do with medicine as it may appear to those without its pale.

As practitioners, objectively considered, this class may be divided into several orders or sub-varieties, which owe their distinguishing traits to the cast of mind, temperament or idiosyncrasy, of its several members.

These divisions we shall next consider, beginning somewhat abruptly with what we shall describe as the Medical Pedant. Pedantry is most excusable if displaying erudition or original thought; but the pedantry we are considering does neither, consisting only of a useless display of unusual words and high sounding phrases. The Pedant's calomel is *sub murias*; his sick lady is "indisposed," and the wormy child has *lumbricoides*. He delights to speak of the *chylopoetic viscera* and the *primæ viæ* in the presence of his patients;—which reminds us that something in his very expression, his hollow eyes, lank visage, and sallow complexion is strikingly suggestive of pepsin and fluid extract of rhubarb.

If you chance to meet him over a fever patient, he will mysteriously whisper, though loud enough to be heard by the nurse, *calor mordex*. In consultation, if the brain should be thought involved, he talks over your shoulder to some real or imaginary listener of the *pons varolii*, or perhaps the *iter a tertio ad quartum ventriculum*. His favorite author is Robley Dunglison. He began his studies in the "Medical Student," and proposes to finish in the "Medical Dictionary." He has a singular and ridiculous habit of transposing his imperfect tenses and perfect

participles, and in many other ways violating the simplest rules of English grammar. Not popular as a practitioner, his patients, like himself, being seedy and non-paying, he nevertheless injures the profession by laying it open to ridicule.

Next in order we shall consider the Empiric, using the word in its more literal sense. While medicine owes much to empiricism, none of us are desirous of having that form of practice tried upon ourselves. It is said that in perfecting the operation for cataract by extraction, the surgeon destroyed a peck of eyes. This was good for mankind but hard upon the owners of the eyes. Our Empiric never conducts the thoroughly scientific experiment that might establish a truth, but attempts to practice medicine mostly with new and untried remedies. He reads the summaries of therapeutics in a half dozen periodicals, and attempts to put the valuable information thus acquired through his patients. He prefers to use even the old remedies in some novel way, and when they are unmistakably indicated he tries their *succedaneæ*. For quinine he would use arsenic or beberine, and for calomel, podophyllin or nitro muriatic acid; or in either case, whatever he had last seen recommended. He considers himself very well posted. Outsiders who know him may think him learned and scientific, but they consider him unlucky. Nor is it strange they do, for his physic would kill his best friend, the bloated undertaker himself, or greatly lessen the life expectancy of a federal office holder.

Not long ago we were consulted by letter, by one of this order, in reference to the feasibility of removing what seemed to be a cancerous tumor of the pylorus, by means of injecting it with tincture of iodine. At the risk of being thought behind the times, we did not advise the operation, and were so unreasonable as to think it might have killed the patient outright.

Now we invite your attention to the Hobbyist. He

is essentially one-idea-ed and one sided. The field of his mental vision is so narrow, that however clearly he may see, he sees but one thing at a time, and that as a rule distorted and greatly magnified. While he remains in love with his hobby, he is oblivious or skeptical about anything else. With him it is "duck or no dinner." Enamored of mercury he salivates his cases of typhoid fever, and proposes to cure consumption in its advanced stages in the same way. He could no more prescribe without it than he could live without air. His peculiarity may be manifested either in the excessive and almost exclusive use, or the total disuse, of any remedy or class of remedies, and all in utter disregard of the best authorities. While not a specialist, he may for the time refer all ills to an imaginary derangement of one organ, as the spinal cord, stomach, liver, or more frequently the womb, in which latter case, with a sort of hystero-mania, he strikes for the womb, without respect to age, condition or sex. He believes doubtless with Darwin in the original identity of the sexes; accordingly when evidently owing to the masculine deviation in development, the womb has been partially omitted, we can imagine him directing his remedies at once to its analogue, the prostate gland. We may infer that upon this brilliant hypothesis only can he recognize disease outside of the unhappy female. Dyspepsia, hysteria, spinal anemia and spinal congestion, with their endless train of symptoms, he esteems but mere varieties of womb disease, and would remedy with the speculum and porte caustique. His zeal for his hobby almost consumes him. He neither reads, talks, thinks or dreams of anything else; it is his idol, he adores it by day and by night. Going back to the beginning, his notion of the origin and causation of evil would seem to be, that the fatal fruit in some way or other effected a lodgment in the pelvis of mother Eve. His philanthropy shapes itself into the wish that mankind had a single womb and that, in order to the eradi-

cation of all disease, he might be let administer to it with the aid of his satchel of improved instruments, thus bringing about man's final restoration in a manner never dreamed of by William Miller.

In closing this sketch we disclaim any disposition to depreciate the advances made in scientific gynecology, by the introduction of the discoveries and improvements of Bennett, Simpson and other learned men. Our only object is to expose a shameful abuse, with a view to its correction.

We next present a more agreeable and attractive character, the Medical Enthusiast. He is an optimist. He believes in almost everything in general, and in physic particularly. While his bump of credulity is large, that of causality is small. He looks on medicine as one of the exact sciences; indeed, the most exact of all. Two authorities differing he may attempt to harmonize them; failing to do this, he believes both. Of drugs he wants a large variety, and plenty of each kind, and the stronger the better. Mercury, opium, barks, croton oil, antimony and veratum viride, are his chief delight. He could not be persuaded that harm could be done with any of them, particularly, if the system should first be duly prepared by the use of copious evacuants.

Towards his medical brethren he is confiding and generous. The only criticism he ever makes, is to express the fear that some one has died for the want of medicine. He never swears, except when a patient of his dies—which, we are pained to say, frequently happens—as he very well knows, simply because some faithless nurse had withheld, at the critical moment, a scruple of calomel or a gill of *spiritus frumenti*. If he lives in a village he prefers to have his office in the back end of a drug store, otherwise he wants a drug store in his office. When it is not convenient to take or administer drugs, he wants to be where he can see them; he is miserable when they are out of his sight. He is never

so happy as when with spoon in one hand, and nose in the other, he is drenching some hapless urchin with castor oil or fluid extract of senna and rhubarb; he feels he is doing good. He worships in the temple of Æsculapius, medicine is his divinity, the United States Dispensatory his bible, and Pariera's dose book his book of common prayer. But we can not pursue his practice further. After all there is something about him so generous, frank and unsuspecting, that one can not withhold his love and admiration of him. His faith inspires that of others, and he is frequently a popular practitioner. Many who hate his physic employ him from motives of personal regard; and some of the more ardent of his admirers protest that they prefer dying in his hands to being cured by his rivals. Such devotion seems incredible, but no physician, who knows the generous confidence often manifested by patients, can entirely doubt it.

As opposed to the foregoing is the Medical Skeptic. He takes nothing for granted; he reads practical medicine, only to find it full of contradictions and inconsistencies. Pope has said: "As the twig is bent so is the tree inclined." *Apropos*, of which we may relate an incident. When our skeptic was a small slender boy, with pale face and black eyes, some elderly matron, a visitor, made the startling announcement that "the child was eaten up with worms;" forthwith he was unmercifully vermifuged, pink and senna, Jerusalem oak and sweet milk, copperas water, weak lye, and various other remedies were employed, but all to no purpose; the worms would not come. The doctor was finally called, and the child was well dosed with calomel, by the action of which, his confiding mother was made to believe that the worms were killed in the stomach and cut to pieces. But, perversely enough, he regarded this dogma of the worms being thus hashed up in his stomach as a vile hoax. At all events, he did not want his vermicelli in that form. This unfortunate circumstance laid the

foundation of his skepticism. What is positively known in therapeutics, he accepts, but nothing more. He is consequently a careful man, and as some would think a timid prescriber. He dislikes polypharmacy, and eschews all powerful remedies, unless there is very obvious reason for their use. If he must give medicine to satisfy his patient's mind, he selects something "innocuous, feeble and non-perturbing;" his mode of practice is almost entirely expectant. He learns not to "labor and wait," but to wait doing nothing, letting nature labor for him. His doses are small and not very frequent.

Should a member of his family be sick, he sends for you almost immediately, desiring you to treat the case, and politely agrees with all you suggest. You prescribe and depart; returning next day you find the patient much better. Upon enquiring about the medicine, he tells you that soon after you left the patient seemed better, and he thought the medicine unnecessary; much to your disgust the patient speedily recovers under this treatment.

At some time or other he may have turned his eyes in the direction of homeopathy, but he finds its tenets so absurd, its therapeutics, founded on its so called provings, so utterly at variance with common sense, its theory of disease so unscientific, that he recoils in disgust at its very threshold.

Next in order the Medical Trimmer demands our attention. He is considered par excellence a practical man; he has, perhaps, the largest and most lucrative business done in the town or county of his residence; he is in the fullest sense a tactician, shrewd and managing if not unscrupulous. By a lucky turn of fortune, soon after graduating, he acquired a large business, which he maintains, not so much by his learning and skill, as by the arts and tricks of his trade. He is of agreeable address and manners, holds a most respectable position in society, and may have acquired wealth. In no bad

sense, he is a man of the world, well balanced, and many sided. Courteous, affable and energetic, he never fails in punctuality. Without being loquacious, he always says the right thing for the occasion, or leaves unsaid the wrong. A natural trimmer, he acts with equal ease in the opposite characters of skeptic or enthusiast, as may best suit his purpose. He cares more to please than cure his patients. In his intercourse with his brethren, he affects fairness and even generosity, acting not so much from principle as with a desire to disarm opposition. He takes care never in anything to offend public opinion. Though moral himself, he never reproves vice or immorality in his patrons. He probably has neither religion or politics, or if he has, keeps them, with his likes and dislikes, far in the back ground, knowing that by thrusting them forward he will more likely incur opposition than win favor. Although recognizing the code of ethics, he is on the best possible terms with the secular press, and not at all averse to the puff *oblique*. It has even been hinted that the "local's" exchequer is somewhat the better of his acquaintance. His literary and professional acquirements are most ordinary, but having relied so long and successfully upon his cunning and *finesse*, he has an indifference if not contempt for books. In public estimation, as well as his own, he ranks many whose scientific knowledge entitles them to be his superiors. We now conclude the Trimmer, having presented him as another mode of expressing our conviction, that a prominent place in the profession, as generally practiced, is often acquired and maintained by means entirely outside of a thorough knowledge of the text books.

Taking the members of this middle class of physicians altogether, and regardless of their peculiarities, their practice can not be esteemed as entirely scientific. They may be, indeed they are, in possession of almost all that is definitely known of special therapeutics, but they are

not always capable of distinguishing between what is matter of knowledge and mere conjecture. Of the higher branches they know but little. Organic chemistry, microscopy, general therapeutics and general pathology, are mainly without the pale of their knowledge; and the same is true of medical jurisprudence and psychological medicine. Most of this class are far from perfect in diagnosis. The most glaring mistakes are sometimes made, involving even the life of the patient. Too many fall into the pernicious habit of prescribing by mere routine, often thus administering the most potent agents in full doses. The more cautious are likely to rely upon the safer expectant plan, trusting largely to the *vis medicatrix naturæ*.

Eliminate from this kind of practice all routine-ism, empiricism and irrational expectant-ism, together with what is done in pursuance of false diagnosis, and certainly no very great amount will be left. Still it occurs to us, that here lies the only dividing line that can justly be drawn between a scientific and a pseudo-medical practice, or "quackery."

Our space is too far spent to more than make a bare mention of the higher class of students and physicians, "who nobler ends by nobler means attain." These belong to the late Dr. Meigs' "scholar class." Where mental peculiarities have existed, they have been brought under control and rightly directed by thorough discipline. This class of physicians are of necessity well versed in all the sciences auxiliary to medicine. In practice they prescribe potent remedies only for recognized pathological conditions, where it is highly probable or certain that good will result. In therapeutics, where so much uncertainty exists, they learn by study and philosophical observation to separate truth from error; and when the lights of science fail, prefer standing still to rushing headlong into darkness. Finally, as respects their profession, embodying whatever things are true, honest, just, pure, lovely and of good report.

We have thus, in our own way, cursorily glanced at practical medicine, endeavoring to view it as it is, rather than as we might desire it should be; more as presented in the every day life of its common exponent, than as expounded by its scientific writers and teachers. In our estimation it is not without great and glaring defects, but its constitution is most healthy, and in its nature it is thoroughly progressive, ever attracting and assimilating truth, and casting off error. Over every system of irregular practice, and the countless forms of quackery, it has ever held and must continue to hold the ascendancy. To its prophylaxis, its hygiene, its surgery and its therapeutics, mankind must ever look, as the safest refuge from suffering and disease. Concluding in the words of Sir John Forbes: "We look upon medicine, regarded in all its parts and bearings, as a noble and glorious profession, even in its present imperfect state; and we believe it destined to become as truly grand and glorious in actual performance, as it now is in its essence, aims, and its aspirations."

ACUTE RHEUMATISM.*

BY J. B. HOAG, M. D., KNOX, STARKE CO., IND.

I have been induced to write an essay upon this disease, principally from the fact, that in treating it, I have ordinarily pursued a course different from that given by standard authors, and have been successful in every case I have treated in a practice of more than two decades of years. During this time cases have come within my knowledge, that have permanently resisted the treatment of physicians of acknowledged skill and ability.

It is well known by those who have had experience in this disease, that the primary symptoms are usually local,

* Read before the Brainard Medical Society, January 4, 1872.

most commonly showing themselves in the lower extremities, often confined to a single joint, or to a part or the whole of one limb, but often affects several limbs, and not unfrequently involves the entire surface of the body. Violent pain is usually the first symptom, followed by increased heat and temperature, the soreness often remaining after the intense pain has subsided. Redness of the affected parts may or may not be distinguishable.

In cases that have come under my notice, I have rarely observed cerebral disturbance. The fever is of a continued character, and like most fevers of this class, increases in intensity as the day wanes and through the hours of night, which at these periods augments the sufferings of the patient. In miasmatic districts the liver is most likely to be affected in one of the above mentioned ways.

A predisposition to this affection, or in other words, a rheumatic diathesis, coupled with undue exposure to cold, produce the dreaded result. That this predisposition is hereditary there can be no doubt. Neither sex, nor condition, exempts from a liability to its attacks; the weak and debilitated, the strong and vigorous, are alike subject to it.

The prognosis is favorable while the affection is confined to the surface, provided especially if the treatment be sufficiently vigorous and appropriate.

I will now speak of the treatment, which during a somewhat extensive practice in this disease, has been in my hands the best adopted to a speedy and permanent cure. I have never yet resorted to bleeding, but in a plethoric patient, with the pulse hard, tense and full, I should not hesitate to employ the lancet. I should do this, not with the hope of removing the cause, but to give the patient present relief, and accelerate the action of other remedies.

If constipation be present I use active but not drastic cathartics. I have never had a case in which I did not

find it necessary to employ them. Senna, jalap, the bitartrate of potassa, or juglandin combined with rhubarb, or small portions of podophyllin are sufficient, unless, as is often the case, the disease is complicated with hepatic congestion, in that case I resort to mercurials, preparations of *sanguinaria canadensis*, etc.

If the patient were anæmic, I would use (after purging if that were necessary) vegetable tonics, as *hydrastis canadensis*, quassia and calumba, but I regard most if not all of the chalybeate preparations as contra-indicated.

Diuretics and anodynes are sometimes indicated, and I have known of cases under the care of other practitioners, in which the acetate of potassa has been used with good effect.

Should coliquative sweats occur, my treatment in order to obviate this difficulty and prevent the inevitable debility that would ensue, is quinine, aromatic sulphuric acid, and cold sage tea combined.

I treated one case of an aggravated character, and brought it to a successful termination in an unusually short time, and believed then and think still, that I cut short the paroxysms by subjecting the patient to a cold sheet bath, and having her covered abundantly with bed clothes, until complete diaphoresis was obtained.

But I have not named my sheet anchor in this disease, that on which I rely for thoroughly and permanently eradicating the predisposing diathesis from the system. I have no reason to believe that the remedies above named will do more than aid nature in restoring the patient from the paroxysm, with which he is then suffering, I have had in my experience or observation no evidence that they will indemnify the system against a repetition of the affection; but long and repeated experiences have convinced me that the remedy to which I refer will do this.

I first became acquainted with its virtues when a boy, in the case of my eldest brother, who for the space of

three years, two or three times a year, was attacked with this disease; not only were his sufferings extreme, but his knee joints were enlarged to almost deformity, and he was incapable of standing erect for more than two years, although for months in succession he was free from the more painful symptoms and able to perform a large amount of manual labor. On his twenty-first birth day he was prostrated with an attack of acute rheumatism, more severe and protracted than any previous one. As is usual in such cases almost every visitor knew of an infallible remedy. None were tried save this one, which my mother was induced to use,—the result was a complete and radical cure. Although over thirty years have elapsed since that time, and my brother has ever since followed and been subjected to the hardships, exposures and vicissitudes of the avocation of a farmer, he has not, to my knowledge, suffered the least inconvenience from this complaint.

In the same State (Vermont) a bound boy, by being exposed to a severe winter's storm took this disease, complicated with a severe cough. He was directed by his mistress to go to the "buttery" and get some cumfrey root, and chew and swallow it for the purpose of mitigating his cough. By mistake he took the root of the remedy under consideration, and the result was a speedy and perfect cure of his rheumatic pains. After his recovery, a physician in the neighborhood overheard him telling some of his companions of the circumstances of his cure, the doctor felt interested, and instituted enquiries of the boy's mistress, and ascertained the remedy he had used, he employed it in the same complaint with unparalled success. This statement I had direct from the physician.

On the evidence of these two cases, when I became a physician, I used it when called on to treat this affection, and it has never disappointed my most sanguine expectations. It seems by its attractive action and specific

influence upon the renal apparatus to rid the system of any predisposition to the complaint. At first I used it in the form of a tincture, made by macerating the root in pure gin, and giving as large and frequent doses as the stomach would bear. Of late years I have used the fluid extract, or resinoid extract in powder, with equal success and far less trouble.

The remedy to which reference has been made is the *phytolacca decandra*.

EDITOR INDIANA JOURNAL OF MEDICINE.—I wish to correct a statement by Dr. Wilson Hobbs, of Carthage, Indiana, concerning an operation made on an inmate of the Soldiers' Home.

At Richmond, Indiana, and Hamilton, Ohio, doctor Hobbs states emphatically that he resected the head of the humerus and the head of the femur in the case referred to. This statement can be read in the June number of the *Indiana Journal of Medicine*, and the Cincinnati *Lancet and Observer*, and in the proceedings of Rush county Medical Society.

I regret that I have to say the statement is not wholly true. I exsected the head of the femur in the case reported by Dr. Hobbs, and if the doctor had possessed the professional honor I awarded him, he would have so stated. He wilfully appropriated that which belonged to another. He has reported this case two or three times, each time making the same false statement.

I regret exceedingly that I am forced to make this correction; to make it, I deem but justice to myself and the profession.

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SUNSTROKE AND ITS SEQUELÆ.

BY C. E. WRIGHT, M. D., INDIANAPOLIS.

The old adage, "To be forewarned is to be forearmed," may in the practice of medicine be construed as follows: He who would successfully treat a sudden and dangerous malady must, beforehand, carefully consider the disease in all its bearings.

Various atmospheric conditions cause ailments as various. Now that the heat of summer is upon us, it is eminently proper that physicians should direct their attention particularly to affections caused by it. In our country, one of the effects of a long continued term of heat, is that sudden prostration of the vital forces, known to us as sunstroke, *coup de soleil*, insolation, sun-fever, ictus solis, sonninstich, calenture, erethismus tropicus, heat-fever, heat-stroke, heat-asphyxia, heat-apoplexy.

A definition of the disease, with our present knowledge of it, would be simply an enumeration of its symptoms. Its termination is either death or recovery, partial or complete—complete when it leaves no ill effects behind; partial when followed by sequelæ, which we will enumerate in the proper place.

Attacks of sunstroke are not wholly confined to modern times, for there are at least two cases mentioned in the Bible. It is rare in England, Watson declaring that he has never seen a case. In tropical countries it is most frequent, and diminishes in frequency towards the temperate zones.

The inhabitants in some parts of our country, in the same degree of latitude, are more liable to sunstroke than those in other portions. Thus if we divide the United States into three equal parts, by lines running north and south, we will find upon comparing statistics, that the eastern or Atlantic portion would claim the greatest number of cases, the central portion coming next in point of numbers, and the western or Pacific

portion presenting the fewest attacks. Whether it is more common in cities or in rural districts, I know not, but certainly we might expect to find it oftener in large cities, where there are more persons to be sunstruck.

It would appear from published reports that sunstroke is rare during some years, while in other years it is of quite common occurrence.

Whenever it does occur, it is an accident to be dreaded, for we find the mortality to vary from 40 to 100 per cent., though 42 or 43 per cent. is the average proportion of fatal cases. In Andersonville prison, Dr. Jones states that all the cases occurring in a certain year proved fatal.

Symptoms.—We will present the symptoms in as brief space as possible, as there are few of us who have not seen a greater or less number of cases, and few who would not recognize the disease at a glance.

The premonitory symptoms spoken of by some authors are, headache, suppression of perspiration, constipated bowels, debility, insomnia, frequent micturition, the urine being increased in quantity, and limpid at first but afterwards becoming diminished or even suppressed. These precursory symptoms are not always present, for the patient may fall suddenly without any premonition whatever.

The symptoms of an attack proper are, briefly: Faintness, vertigo, extreme debility; discoloration of objects, (subjective); thirst; skin hot and dry, rough and scaly; face pallid, livid; sensation of tightness of chest, or weight over sternum, feeling of suffocation; breathing difficult, stertorous—though not like the dyspnœa of apoplexy; vomiting, nausea; headache, (not common according to some authorities); eyes congested, and fixed upwards, pupils contracted and insensible to light during coma; patient falls on face; pulse, sometimes and generally quick and full at first, intermitted, but feeble and compressible towards the fatal issue; urine, at first, limpid and increased in quantity, occasionally

incontinence, afterwards nearly or entirely suppressed; heart beats violently, and pulsation in carotids may, in some instances, be seen at some distance; coma; convulsions; body heat, 104° to 114° F.; temporary insanity; time of day usually from 11 A. M. to 4 P. M., but may occur at any time of day or night. The symptoms are not to be confounded with those of cerebral apoplexy, violent continued fever, or remittent fever.

[TO BE CONTINUED.]

Proceedings of Societies.

PROCEEDINGS OF THE INDIANAPOLIS ACADEMY OF MEDICINE.

HEART SEDATIVES.

Dr. Hadley in opening said: The greatest difference exists among writers and practitioners as to whether some so called heart sedatives are tonic, stimulant, sedative or depressing, or if some of the remedies possess all these properties. He believes from what he has observed, that the majority regard the several remedies to have in certain doses sedative properties.

In cardiac diseases we have blood letting, resorted to for the purpose to relieve either hypertrophy or dilatation, or both together, inflammation or palpitation.

Nitrate of silver is, or has been used to quiet excessive action of the heart, and is recorded to be a powerful sedative in functional and organic diseases of this organ by Kopp and Hanau.

Of acetate of lead, *Stillé* says: "Its sedative influence on this organ is too well determined, by the concurrent testimony of competent witnesses, for us to entertain a doubt that it may palliate the violent palpitations which sometimes accompany hypertrophy." It is also

asserted that it reduces the size of an hypertrophied heart. By what properties it reduces an enlarged organ it can not be discovered, except it be that in hypertrophy from excessive action, the lead sedating the excited action.

Conium is narcotic and rather sedative to the circulation. It is said to directly diminish the action of the heart; when death is produced by it, it exhausts the contractility of that organ.

Cinchona and its preparations in small doses excite the rapidity of the heart; larger doses repeated, render its action slower and fuller. This medicine given in these large doses causes such disagreeable cerebral and nervous symptoms as to preclude its use as a sedative to the heart. Guiacarainis says, forty to fifty grains taken during the night reduced the pulse about twelve beats per minute. Favier determined that twelve grains a day reduced his pulse from standard to fifty-seven beats per minute, afterwards to fifty beats; after taking fifty grains it fell to forty-five, and then to forty beats per minute and became thready.

Hydrocyanic acid is a sedative anodyne and anti-spasmodic. Although Andral declares it more injurious than useful in cardiac affections, it is as certainly true that it is of great service in irregularity or palpitations, either from excessive action from hypertrophy or dilatations, or irritability from any intemperate habits or excessive practices.

Opium produces a most happy effect sometimes as a sedative, indirectly to the heart as well as directly, wherever the irritation is. This remedy is a stimulant sedative, increasing notably the strength of the heart.

Bromine, and its combinations, is a nerve-sanguine sedative, hence may be inferred the value of this remedy in diseases of the heart. It is said in substance that all symptoms of the action of this medicine may be attributable to its action in diminishing the capillary circula-

tion, chiefly of the nervous centres, but also of the other organs.

Gelseminum is a nervous and arterial sedative, especially in febrile affections, reducing the frequency and force of the pulse, also of the respiration, producing languor and muscular relaxation and insensibility to slight pain, but without stupor or delirium.

In aconite we have a genuine moderator of the heart's action and of the circulation, but one which rather tends to depress. It seems to stand next best in the order of true tonic heart sedatives. In a long treatise on this article, Dr. Fleming arrives at the following conclusions: 1. That it is a powerful antiphlogistic. 2. That it is calculated to be of great value in all cases where there is inordinate activity of the circulation. 3. That it is contra-indicated when there is an obvious mechanical impediment to the passage of the blood, particularly through the heart or lungs. 4. That it is contra-indicated wherever there is irritability of the circulation, with great diminution of power, such as occurs after severe venous hemorrhage.

Veratrum viride ranks about third in the opinion of many practitioners, being an undoubted sedative to the heart and nervous system, and in addition to these properties, possesses such a multiple of other ones as to make it unpleasant if not unsafe to continue its use. Concerning this medicine we have some record of home talent. Thus Drs. Hutchinson, of this State, and Jameson, of Indianapolis, have declared as their opinion, that the medicine "indirectly restores the depurating functions of the liver and kidneys," and that "its influence in cleansing the liver is greater than that of any other article." Stillé said, "In other words, it combines in itself the virtues of nearly all the materia medica besides." He had just enumerated the various claims for the medicine. There are such diverse conclusions as to whether it is a stimulant to the heart, or a sedative or

a depressant, that little can be judged from essays or *materia medicas*. He is certain it is a powerful depressant after having caused vomiting, which it frequently does, and that of a severe and prolonged character. Probably the action is stimulant, tonic or sedative in doses too small to produce emesis; beyond that it is depressant.

There remains *digitalis*, extolled and abused as extremely as any of the above, although this remedy, it is claimed by some, directly depresses the power of the heart. Later writers, if not better doctors, claim it as a decided tonic to the heart. Such has been our small experience; whether tonic directly or not, it is so indirectly in the way of heart difficulties, where there are effusions of serum, in areolar tissues of the body, this *digitalis* removes. The same time that it corrects the secondary effects, it relieves or tends to relieve the cause. *Digitalis* is said to be cumulative in the system, to act suddenly with power after having been administered constantly with little noticeable effect; as the medicine acts slowly and lasts much longer than others used for the same purpose, it is probably its effects are not noticed or not heeded till the patient is decidedly under its influence, when this extreme exhibition results from the last incautious doses.

Dr. R. N. Todd.—This subject is one on which the experience of medical writers, and the observation of practitioners vary as much as any one which could be presented for our consideration. The fact that the physiology of circulation is unsettled, leaves the pathology extremely difficult to determine. Observation has taught us that the circulation is, to a considerable extent, under the influence of the nerve force. A disturbed condition of the circulation results from such a state of the system that it is almost impossible to lay down an exact rule for treatment. For instance take palpitation of the heart. How often has it been, when led to see a

patient whose blood vessels have been emptied, that you find a violent palpitation—an extremely excited state of the organ—that irritable state of the heart which threw it into violent palpitation? Who has not met with cases of excessive palpitation from acute inflammation? Take a healthy, vigorous man, and let him become the subject of an acute inflammation of a pulmonary structure, and let the peculiar poison of that disease commence affecting the living membrane, and who has not observed the palpitation it produces? You have palpitation from exhaustion in one instance, and in the other the forces are disturbed by nervous sympathy, mental emotions, and such violent causes that the remark comes back forcibly: It is difficult to lay down a pathological rule in the application of medicines.

As to heart sedatives, the author of the paper is probably as definite as any one can be. What is a sedative in one case, may be a stimulant in another. Take aconite, for instance. As a general rule, it is a sedative in action of the heart, but there are certain conditions of disturbances in which no physician would think of prescribing aconite as a sedative. Brandy and beef tea would be sedatives if debility was the cause. If, however, you had a plethoric subject in good health, whose heart was inordinately active, you would feel like being very cautious in using some of these sedatives.

The formation of coagula has had an important bearing on the irregular practice of some physicians, when they see a heart disturbed, of prescribing arterial sedatives, which is not always a good practice. The fact is, the whole tendency of modern therapeutics is to vary from the dictates of rational philosophy. The more we apply the laws of nature, the more strength will be given to recuperative forces; the more we appreciate the natural tendency of disease, the better physicians will we be. I do not wish to detract from the class of remedies, but they are certainly a class that should be

employed by the cautious practitioner with the utmost care.

With regard to the subject of digitalis, I believe the writer has taken it for granted that it is an arterial sedative. I don't believe it is. I have used digitalis as I would have used French brandy to a certain extent, and have seen its strength when the patient's pulse was quick and when excited, just as you find a man when in an exhausted condition from delirium tremens, and digitalis has had a beautiful effect; proving that it is a stimulant to the heart's action—not acting as a depressant, but as a stimulant. I have given it to the extent of eight or ten drachms. I recollect being called to a case of delirium tremens, where the patient had not slept for several nights. The man's pulse was small. I suggested digitalis, and gave it with the happiest effect. I don't recollect how many doses, but he slept eight or ten hours. My views of a heart sedative are, that the peculiar condition presented must govern the agent to be selected. Simply the expression, "exorbitant heart action," is not a sufficient indication by which to select a remedy. The cause must be ascertained first, and then the remedy addressed to it.

Dr. L. D. Waterman.—Several interesting points suggest themselves in the paper read, but there are only one or two matters I wish to speak of. When in the army during the last war, I remember, after an attack of camp fever in the regiment, we had a great deal of debility. The men were put upon duty rather too quick, and the result was I had a great deal of what we called irritability of the heart to treat. It seemed to be a want of enervation of the centres of the heart. The men got hearty and ruddy, they had red blood enough in quantity; still if they undertook to do work they couldn't stand it. I remember a surgeon, Dr. —, discharged about one-third of the convalescent camp for insufficiency of the valves of the heart. We tried a great

variety of treatment in endeavoring to control that excessive action. It seemed that the heart would contract on a small amount of blood, and contract so violently as to strike the ribs with force. These cases we treated with digitalis. Quinine seemed to aggravate in its first effects. Opium would control the irritability, but of course would interfere with the secretions, and produce a condition of things not favorable. We tried a number of remedies. We tried the range of heart remedies furnished by the Surgeon-General's office, and I tried others. When in Nashville I experimented on that class of cases. I remember of putting six cases on good diet, getting them relieved from duty, and administering to them balsam copaiva; you may know how hard put we were for remedies, when we had to resort to so empirical a remedy. I went upon the principle that there was a condition of things such as is followed often by camp diarrhœa, and I tried these cases with balsam copaiva with good effect, but in those six cases I never saw any reason to believe that I accomplished anything directly or indirectly.

I remember a drummer, who appeared to be just as well as anybody, who was hearty, ruddy cheeked, joyful, and seemed to enjoy life hugely, that was sent to the hospital, and after watching him a few days, I would think he must be well and send him back to duty. In four days they would send him back to the hospital, and for 24, 48 and 56 hours he would, sleeping or waking, have that excessive action of the heart. When he would be relieved, after a little fatigue, it would all come back again. I told the best diagnostician we had there to examine him, and he discharged him for insufficiency of the mitral valves of the heart. In three months after I met the man, and he told me he could carry a trunk on his shoulder for half a mile, showing clearly that there was no organic injury about the heart.

Gelseminum, I regard as being a paralyzer to a certain

extent of the muscular fibres. I had the curiosity, when in Kokomo, to experiment with it on myself. I have had to exert my will to keep from seeing double out of one of my eyes, and I remember the first dose of gelseminum I took—it was a large dose. I saw double in spite of myself, I felt weak, languid, and what we call nervous, and it affected the internal rectus muscle of my right eye so that I couldn't bring the eye to see a single object; I would have double vision in spite of fate. I noticed the same effect from fatigue. When I was Secretary of the State Medical Society, I read the proof of the transactions, which had to be done at night, and I would sometimes read four or five hours—I would read that proof over four or five times—and I found by the time I was done reading that I had got double vision; and for two or three weeks after I would be compelled to rest my eye to prevent my seeing double. Ordinarily I can see as well as any person. But I remember that as the effect of gelseminum, it gave me a sense of languor and prostration, feeling as though I had no strength in the muscles, and a double vision extending through some three days and nights.

Dr. T. B. Harvey.—I was interested in the reading of the paper by Dr. Hadley. I think it one proper for the consideration of practitioners. In regard to some of the remedies suggested, I have no experience whatever. Sugar of lead and nitrate of silver, I know are placed amongst the list of sedatives. I presume they simply act as curative sedatives on the muscular fibres. I should be induced to look on sugar of lead as a poisonous agent, and in this way producing a sedative influence on the action of the heart. All the preparations of lead are poisonous to a certain extent. All remedies suggested by the writer, or by any one else, act upon the system primarily. I do not believe there is a remedy that can be selected out of the bill read to-night, which can be administered and have any special effect on the heart prior to its

action on the nervous system. Cinchona is a remedy recommended; it acts as a tonic by building up the nervous system. We know the effects of salts of cinchona, it has such an effect on the brain that it can not be continued long. Opium has long been recognized as a remedy for disorders of the nervous system; and quinine and gelseminum are admitted to be poisons acting primarily on the nervous system. They paralyze the muscular system, and in this way quiet the whole system. Gelseminum I regard as a valuable agent in acute affections. I rarely ever prescribe this in chronic affections, but as a remedy in an excited condition of the circulation. I regard gelseminum as an invaluable agent, not only in quieting the heart and arteries, but in relieving pain. And aconite I regard much in the same light as gelseminum. I don't know that there is really much difference in the two. Aconite has a poisonous effect, and it is a valuable agent in all affections, having a central origin. In inflammation or congestion of the brain, aconite is one of the best remedies; and it has a tendency to relieve acute affections. My experience has led me to have more confidence in it than in any other therapeutical agent, though I never noticed that it had any special effect in quieting the action of the heart.

Ten or fifteen years ago, it was the usual practice to treat all malarious diseases with veratrum veride. I have seen such fevers broken up much more certainly after the effects of veratrum veride, it producing the vomiting of a thick mucus, hanging upon the floor where the vessel was sitting, than I could by any other treatment. When I came to this city, I did not adopt the practice so much, and I think was not as successful in breaking up these forms of fever as before. I have since resorted to that treatment, and found that when I would produce vomiting, the patient would recover more rapidly. There is one fact you will notice, and that is that the action of the heart is very seldom interfered

with much until the nausea of the stomach affects the patient, showing that the remedy is absorbed first. It does not produce vomiting directly, but several hours after administering veratrum you notice that the patient becomes sick, and after becoming sick the effect is noticed. It is a remedy that is first absorbed, and then the effects are noticed. I have used it in preference to digitalis in forms of chronic affections, from the fact that I regard its action as less dangerous. We know the antidote for veratrum veride, but we do not know an antidote for digitalis, under the effects of which the patient suddenly dies, and no time is given for the administration of an antidote; we all know that we can administer morphine, and prevent the peculiar effects of veratrum by hyperdermic injections. I have seen patients vomiting and sweating with a pulse at fifty or sixty, and at the same time relieved such patients with a dose of morphine. I regard it in acute affections as more safe than digitalis. I have used it in chronic affections, where I wanted a remedy that could control the excessive action of the heart. But I have used digitalis. As a tonic, it has a favorable effect upon the vascular system. I don't believe its effect is confined to the action of the heart. How often have you seen a case where an individual suffering from dropsy, has been relieved by digitalis alone? It has an effect upon the whole vascular system, and in this way relieves congestion of the kidneys, and stimulates them to action.

But there is an article I think we have neglected, that is the tincture of arnica. Last year there was an article in the London *Lancet*, showing its beneficial effects in the early stages of pneumonia—showing that it relieved the patient and reduced the action of the heart as well as veratrum veride, and much sooner than digitalis; and when the action was reduced, it didn't require to be repeated—it did not seem to be cumulative, but the heart's action was kept about the position it gave it. On

the strength of this article, I tried the remedy in one case. In that case it reduced the action of the heart very considerably; I don't recollect the frequency of the pulse, but it was reduced, and had a favorable effect on the patient.

I agree with Dr. Todd, that in the selection of remedies for affections of the heart, we want to know the pathological condition, and treat the patient accordingly. We don't want to give a depressing agent. If we want an arterial agent, we have it in digitalis; in other cases beef tea, brandy and quinine, are better curative remedies than any special agents. There is a condition of the heart, called neuralgia of the heart, in which the patient suffers excruciating pain, and it is noticed that there is a flatulent condition of the stomach at the same time. I was in the habit of regarding this pain in the heart as resulting from a flatulent stomach, but I am satisfied at the present time, that the manifestations in the stomach and in the heart are both results from the same cause, and that is from centric disease of the brain. When a patient is affected with this form of disease, both the pain in the heart and the flatulency of the stomach are simultaneous. I always regarded the heart as secondarily affected, but I now regard it as the same disease of the nerves which require the same remedy, that has an especial effect on the brain. I have found, given in connection with a tonic like quinine, we require a most active stimulant. In this condition we should not depend upon a curative sedative. The heart is laboring and producing pain in the chest, and it would not do to depend upon a curative sedative, but by administering alcoholic stimulants, and such remedies, the patient will soon have a quiet action of the heart.

Dr. R. N. Todd.—In regard to some therapeutic agents, that Dr. Harvey mentioned, I inferred that he is induced to refer the action of therapeutic agents to the nervous centre as a common source, and from thence re-

flected to the heart. There is that same effect shown in other matters. Belladonna acts in one direction, opium in another, ergot in another; other agents have an effect on the cardiac nerves, and there are a class of remedies that do not produce an effect so much through the brain, as through their operation on the nervous system. I am inclined to regard digitalis, aconite and veratrum veride, as belonging to that class. That certain portions of the system are put under the influence of certain remedies to the exclusion of others is unquestionably true. There are those which produce a primary effect on the brain, and are reflected in different portions of the system. But this is too familiar a subject to take up the time of the Academy with.

Dr. Walker.—I would not be induced to favor the number of remedies referred to by the essayist. In the first place I am inclined to the opinion that nitrate of silver has but little influence over the heart in any way; I am not inclined to the opinion that it is entitled to a position amongst heart sedatives.

When we come to the consideration of gelseminum, I think it probable that article has some tendency to quiet the heart's action, at the same time I think it a remedy not adopted in general practice. It is a remedy I have not been in the habit of using for a number of years. I think the fewest number of cases occur where we are justified in its internal administration.

When we come to the consideration of aconite, I think it has a proper place in the treatment of the acute diseases of the heart. I believe aconite to be a valuable remedy in the treatment of acute diseases proper. I know no remedy that suits my purpose so well, to control the inflammatory condition internally, as aconite; yet I am also inclined to the opinion that it has a decided influence over the heart's action—in just what way it influences the heart, I do not think I know. The *modus*

operandi of a great many medicines we administer, are certainly imperfectly understood.

When we come to the consideration of veratrum, I think that article has a place in the treatment of acute diseases, and occasionally in the treatment of chronic diseases. My notion has been that veratrum is more especially adopted to the treatment of pneumonia, than perhaps the treatment of any other form of acute disease; in fact I rarely administer that remedy in the treatment of any other form of acute disease. It does seem to me that it has a special tendency to control the inflammatory condition of pneumonia by quieting the heart's action, and its sedative influence on the nervous system. I think also we have occasionally a chronic form of disease that is benefitted by the judicious administration of veratrum. I am inclined to think that is nervous debility more than a positive organic disease. When we come to the treatment of organic diseases of the heart, especially on enlargement of the ventricles of the heart, there is no remedy in which I have as much confidence as that of digitalis. I do not believe that digitalis is an arterial sedative at all; I believe it to be a cardiac tonic. I believe digitalis increases the muscular contractility of the heart, imparts to it a tone, stability and firmness; but it is questionable in the case of hyperthrophy of the heart, whether digitalis is the remedy all the time. Some prominent writers insist that it is; others think its effects positively injurious where you have complete hyperthrophy. I don't think there is a writer of prominence who says that digitalis is wrong where you have an enlargement of the ventricles of the heart and valvular disease. I believe it the only remedy that will benefit those cases, and bring about a radical cure. We have another condition of the heart in which digitalis is wrong, that is when you have contraction of the heart's *aortic valves*. In a case of that kind digitalis would be wrong, because the

heart is too much contracted; you would only overtax it and injure the patient. Again, I believe that digitalis is an invaluable remedy where we have extreme agitation of the heart, or extreme palpitation, from general debility of the whole system. * * * My position is that it acts as a cardiac tonic, increases the muscular vitality and thereby rests the heart, and if you rest the heart you rest the whole patient, and diminish the great wear of the system, which is going on when the heart is acting so violently. I am aware a common notion exists to-day in the medical profession, that if a patient is debilitated over much, and is suffering from a chronic form of the disease, and has, as a consequence, palpitation of the heart, that digitalis is wrong. Right there I believe the remedy does good nearly all the time. I don't believe that digitalis is the proper remedy in the treatment of an acute form of disease as a rule. When we have an inflammatory condition, or where we have congestion, in most instances digitalis would do harm. Where we have a plethoric condition of the system, with more or less febrile excitement, our first duty is to relieve the patient of this plethora, and thus prepare the patient for digitalis, and then administer it. There is where it differs from veratrum. I believe it right to use veratrum in congestions and inflammations of different kinds, but I do not believe digitalis is adopted to that condition.

Dr. J. Thompson.—Concerning a great many of these remedies, I think on the one subject of sedatives, the remarks ought to be qualified. Quinine is sedative in large doses, and in certain diseases would do well; others I know act on the principle, that if they don't do any good they do no harm; but when we give veratrum as a sedative, and the patient vomits, we have to stand by the patient. Suppose it were given in the case of an infant, the antidote would be worse than the remedy.

We have antimony in inflammatory cases, which I

believe is superior to veratrum. So it can be said of many of these remedies, If they do no good they do no harm.

Dr. Harvey.—I want to be understood in what I said in considering the agents acting upon the heart, as acting through the nervous system. I fail to agree with the position taken by Dr. Todd. There is apparently certain elective effects produced by certain remedies. My idea would be better elucidated by taking up purgatives. We have aloes, sulphate of magnesia, and a host of other remedies that will act on the alimentary canal, hence we call them purgatives, cathartics, laxatives, etc. We know that these remedies act, some of them, on one portion and some on another, yet they all act on the alimentary canal, and are regarded as cathartics. It is the same way in regard to these remedies as acting primarily on the heart.

I do think that where we have a given condition, we can select a remedy which will suit that condition on account of its effect on the brain and nervous system. We have a continued fever or congestion of the brain, in which the patient will not be benefited by narcotic remedies, but you want to give aconite or some remedy to quiet the action of the heart. So you have chronic diseases, and you want a remedy that can be given for a length of time, and you have digitalis, which, undoubtedly, acts through that system, because it is known to quiet the nervous system. Certain oculists, when they are about to perform a delicate operation on the eye, take a little digitalis to quiet the nervous system; one grain of digitalis will so quiet the nerves, that they can perform the operation for cataract without the tremulousness, which frequently attacks all surgeons in performing operations of any kind. If it has this effect on the nervous system, it certainly acts through the nervous system in producing a sedative effect upon the heart.

Dr. L. D. Waterman.—With regard to aconite, to take up the argument at the point Dr. Harvey drops it, those articles that seem to steady the nerves, are often the articles that paralyze the nervous action. Preceding a surgical operation, men of a certain temperament become too much excited. It is upon that ground that I have seen good lawyers, in the court room, drop their papers from nervousness, until they would take something that would produce anesthesia. In spotted fever, aconite with bromide of potassium, is the remedy I relied upon. In a child's pulse, running from 125 to 130 in 40 or 60 minutes, watching it as carefully as a man can, the pulse would diminish and become calm, and the system would ameliorate just in proportion that they become calm. I am satisfied that a large part of this effect was produced by aconite.

There is another remedy that, in my judgment, demands more attention, and that is nicotine. I think that agent, acting through the sympathetic nerves and the system generally, if we could separate its good from its bad effects, would give us some good results. With persons that have never used it, it seems to act upon them sympathetically, and produces nausea; but I think we will be able to make it a valuable remedy yet.

Dr. Cook.—In such cases as those mentioned by Dr. Walker, some eight years ago I used it right along, of which I kept some record. It produces a peculiar emesis, but when taken in season is the greatest remedy known in that particular affection. I have used a little in malarious affections, but as far as I have used it in conjunction with quinine or the barks from which it is derived, I found recovery more rapid and apparently more complete.

As far as digitalis is concerned, I never had sufficient favorable opinion of it to justify its use in my own experience.

In regard to arnica, I remember a circumstance that

happened in my practice some five years ago, where a woman, who always kept an arnica bottle on hand ready to apply to the children when bruised or hurt, had veratrum veride prescribed for her by a physician. At one time, she, by mistake, took the arnica instead, and being much frightened, supposing it to be poison, immediately sent for me. Having taken about the same quantity, no immediate results were discovered from that which might be expected from veratrum. The woman herself thought it of immense advantage afterwards, and proposed a change.

Dr. Hadley.—In closing the discussion on his paper, simply remarked: Last winter I had a case of bronchitis, and I know now what cured it since the doctor spoke. It was a case of a similar type and scarcely distinguishable from pneumonia; and one night the pulse became so rapid that veratrum veride was given to control it. About midnight the patient commenced vomiting. I was sent for about two o'clock, after the patient had vomited a good deal, and I immediately gave wine. The next morning my patient was better, and the morning of the second day discharged as cured.

Dr. Chas. N. Todd (in his seat).—I would like to protest against giving veratrum veride until vomiting is produced.

Dr. Harvey (by permission).—I want to express my opinion to the contrary exactly. If we would use veratrum where we ought to use it, we could arrest and break up disease much sooner; and the bad effects of veratrum veride can be relieved promptly by a preparation of opium. I never saw a case that did not improve after the effects of veratrum veride. I speak in regard to this matter, without a disposition to differ with any one, but as a matter of observation in ten or fifteen years' practice. I have never seen its evil effects. I think there is unnecessary fear with regard to veratrum veride. There is a copious secretion of mucus vomited up, which

is a reaction of the system, and the patient is relieved. I know of a patient who took a teaspoonful in the third week of typhoid fever, when he was very weak of course, but convalescent, and he died. Hours before, his pulse kept up to 160 a minute, showing that if poisonous at all, it was from the combined effects of the remedy and its antidotes.

Dr. J. Thompson (by permission of the Academy).—To use a quotation from an eminent Scottish writer, I might say: 'Tis "divine, rare, excellent, which goes far beyond all their panaceas, potable gold and philosopher's stones; a sovereign remedy for all diseases. A good vomit I confess; a virtuous herb, if it be well qualified, opportunely taken, and medicinally used; but as it is commonly used by most men, who take it as tinkers do ale, 'tis a plague, a mischief, a violent purge of goods, lands, health; hellish, devilish, damned; the ruin and overthrow of body and soul." [Laughter.]

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of county practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

WE vote proof readers a necessary nuisance, and intend to "go" for them in a way they ought to "despise." In the last number, the "u" in Glaucoma is made to turn a summersault and come down to an "n," while in the foot note, Indianapolis has lost its *tail*, and appeared as "Indiana," also, one gentleman is made to give 5½ grs. morphia in a case of tetanus, when there was only ½ gr. given. For fear of a repetition we have made different arrangements, and hope hereafter that the

Journal will be *entirely* free from all typographical and other errors.

ALL who found their bills in the last (July) number of Journal, will please refund by money or explanation, or we shall reluctantly be forced to consider they do not wish to continue subscribers. A few errors as to amount of bills, etc., have been pointed out to us, for which we are thankful.

FOR SALE—A medical practice worth from \$1,500 to \$2,000, in a pleasant village, with small but comfortable house, three lots, good outbuildings, also ten acres of land planted in fruit trees, apple and peach, not yet bearing. Terms—All taken together, \$1,600, \$1,000 in cash, balance in one, two and three years. No other physician in six miles. Apply immediately, with stamp if answer is desired. A small drug store for sale in connection with the above, if desired. Address, Snodgrass & Dodds, Real Estate Agents, Bloomington, Indiana. Or, Physician, White Hall, Owen county, Indiana.

UPON the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

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Original Communications.

THE NERVOUS SYSTEM IN DISEASE.

BY R. E. HAUGHTON, M. D., RICHMOND, IND.

1st. All parts of the human body are connected with two centres, the heart and nervous centres.

2d. The brain, spinal cord and sympathetic ganglia, are the nerve centres.

3d. There are two fluids which circulate, viz. the nervous and from the great centres, and the blood, to and from the heart.

4th. The heart is involuntary in its work; being under the control of the organic nervous system, together with all the system of vessels.

5th. By these means, all the tissues and organs exert a continuous influence upon the nerve centres, and these continually supply power and influence to organs and tissues, keeping up normal nutrition, and growth, and secretion.

6th. Man must be considered in reference to the influences exerted upon him, as the result of co-ordinated forces manifested in sensations, emotions, volitions, in-

*Read before Union District Medical Association, Connersville, Ind.

tellections. When disease invades the body, these manifestations of co-ordinated forces are modified, intensified, or changed, according to the amount, intensity, and continuance of the disease, and also more particularly by its locality.

Again, disease of any organ involves the life history and influence of the individual *cells* of that organ, upon which depend its normal, functional and organic activity. To maintain and preserve health, it is important that the individual cells should grow, develop, and die, in the proper performance of their true functions, viz. growth and nutrition of the tissue. When failure occurs in this important duty, disease results to the organ, of which the cell is a component part, and may be either organic or functional, or both. When disease thus results, it expresses itself through the nervous system in sensation or motion, which are interpreted, converted into language, or co-ordinated. But the existence of disease, in a single cell, or number of cells, finds its primary, or incipient departure in the nerve force, so supplied to the cell or cells which thus become diseased: First, because the nervous influence or power controls all the other influence or power in the body. Secondly, the heart itself which circulates the nutritive fluid is wholly dependent upon the nervous system for its power to circulate the blood. Then we place all departures, and dependencies of disease, exclusive of traumatic ones, in some primary or elementary deviation in the nerve centres, which supply and control all power for health or disease. Dr. Southwood Smith enunciated this doctrine long before cell pathology was known in this language. "The first link in the chain of morbid events, is Lesion of Innervation." This is demonstrably clear in the nervous forms of febrile disease, as well as those which are admitted to have the *fons et origo*, in some poison which has influenced the blood and secondarily induced disease. The first manifestation in any or all such cases,

is found in the nervous system, as shown in those conditions, expressed often so forcibly by the cerebro-spinal centres, viz. pain in the head and back, with languor or weariness. If we examine the history of spinal irritation, neuralgia, rheumatism, and especially of diseased conditions, which reflex their irritation upon the general nervous system, we find that there is growing evidence that the primary departure from health originated in the nervous system, which continues to be irritated by the growing disease, until the nervous system is wrought into powerful irritation, producing convulsions and death. Dr. Weir Mitchell thinks he has proved rheumatism to be of spinal origin, and his treatment founded upon this view, has been most successful. He says, "That modern pathologists have supposed they traced the causation of rheumatism to a strictly chemical source, and on this basis it is now treated, yet it is quite clear that the chemical cause or poison is only a secondary link in the chain of events, and that, after all the true origin may be spinal." That rheumatism and chorea are intimately related, is now as well known a fact as is the association of the former with pericarditis and inflammation of the endocardium, and the very interesting relationship between these elements of disease, has received further illustration by the association of chorea with endo-pericarditis. It is possible, therefore, that the fact that there are rheumatisms depending for their existence upon cell changes in the neurine of the spinal cord or brain, may yet necessitate varieties of type in rheumatic diseases. In Scrivener's palsy we have another condition in which the disease is located in the spinal cells, which disease prevents the co-ordinating power from being exerted through the anterior columns of the white matter of the cord. The researches of Lockhart Clarke and Shroeder Vander Kolk, into the anatomy and physiology of the spinal cord, go far to prove that the

writer's palsy depends upon disturbance or actual disease of spinal cells, which show granular degeneration. *

Nervous exhaustion is a form of disease found in persons who are laborious students and others of sedentary habits, who tax their nervous system improperly, till we find impaired health, as manifested in impaired digestion and strength associated with neuralgia, nervous twitching of muscles, with anxious nervous facial expression, palpitation of the heart, sometimes with rapid action of heart, and which Dr. Da-Costa calls "*Irritable Heart*" or "Functional Cardiac disorder and its results." In this class of cases, one of which I have carefully watched for several months, we find the symptoms all indicative of a disturbed state of the cerebro-spinal centres, as well as of the sympathetic nervous system, being manifested by persistent headache of a neuralgic character, associated with tenderness of the spine, with vomiting, diarrhœa, flushing of one side of the face, and coldness of one side of the body. To satisfy myself of the nervous origin of the trouble in my patient when vomiting ensued, for which I could not satisfactorily account, but which I believed to be sympathetic, I directed ice applied to the spine, with the result of promptly controlling it. This was adopted, first, to prove as far as possible that the nausea was a sympathetic disturbance, caused by the condition of the brain and spinal cord, and, secondly, to secure for my patient the most prompt relief, who seemed to be in eminent danger of exhaustion. Dr. Chapman, of London, suggests the use of this remedy in sea sickness, which must also be regarded as a reflex disturbance of the stomach, caused by a condition of the nerve centres induced by the motions of a vessel upon water. It is a functional nervous disturbance involving secondarily the circulation; hence Dr. Chapman says:

"The proximate cause of sea sickness consists in an undue amount of blood in the nerve centres." "The

only scientific and really effective remedy for sea sickness, must be one which has the power of producing a powerful impression upon the centres of the nervous system, thereby lessening the amount of blood in the vessels, especially of the cord." "This is effectually done by the ice, which might seem to be a heroic remedy, yet is found to be not only successful but very agreeable to the patient." So in the nausea of pregnancy, which is occasionally very obstinate. Who has not observed the benefit in these reflex disturbances from the use of ice, both internal and external? These reflex irritations are produced through nervous agency or sympathy, by which remote organs in the economy, are held in the closest relationship. The remedy must have reference, first, to the disease, which may have local origin, and continually reflexes its irritation upon or through the spinal cord and brain, which again reflects such irritation upon various other organs, not themselves diseased, as the heart, stomach, bowels, liver and lungs. There is no field of pathology, in which such influences are so constantly observed as in that of uterine pathology. But it is not in the field of reflex nerve pathology, that we find the most important evidences of the influence and power of the nervous system in disease. Let us examine some of the troubles of centric as well as of excentric origin. In progressive locomotor ataxia aphasia, paralysis of different kinds, both direct and reflex, tetanus, epilepsy, centric and excentric chorea, asthma, angina pectoris, and many other troubles properly *neuroses*, which are not now so considered, we find constantly conditions which show us that many of the conditions of disease, both acute, inflammatory, and chronic, are proven by many facts in pathological and physiological research, (which facts meet with astonishingly little attention) that lesion of function or structure of nerve tissue lies at the foundation of a large number of these affections. How remarkable is the persistence with

which the majority of practitioners of medicine ignore the direct dependence of many inflammatory skin diseases upon an impaired condition of certain cutaneous nerves; for instance, shingles (*Herpes Zoster*) and some other forms of herpes. Researches into the history of nerve pathology show that section of nerve trunks causes not merely dilatation of the vessels and other phenomena immediately traceable to dilatation, but also gives rise to suppuration in superficial parts exposed to friction; also in parts deep seated, causes an increased proliferation of the connective tissue, which is found to multiply in a remarkable manner, while the higher tissues, as the muscular, shrink up and undergo degeneration in a manner which indicates a condition beyond mere disease of the muscular fibre. Progressive muscular atrophy—the condition of medical opinion is divided upon this disease. One class of investigators follow Aran, in believing it to be a simple myopathia, and the other class believe with Cruveilhier, that it is a neuropathia. As yet, while the sympathetic nervous system plays an important role in the pathology of this singular malady, it is still *sub-judice*. To state the present aspect of the inquiries which remain to be settled, the following questions are yet to be answered. First, “Are the lesions of the great sympathetic constant in progressive muscular atrophy?” Secondly, “If they are, is the disease transmitted to the great sympathetic, by following a centripetal course, that is to say, by extending from the muscles to the peripheral nerve—to the spinal nerves, etc.?” Thirdly, “Does the affection commence in the great sympathetic, and follow a centrifugal course?” The answer made to these questions, upon a substantial investigation, will throw great light upon the influence of the great sympathetic, upon other forms of neuroses, as well as those which are not of that class. Dr. Chapman says, “It is probable that the more the diseases and functional derangements of animals having a nervous

system, are investigated, the more they will be found to originate primarily in altered conditions, or states of that system." He continues by saying, "That the proximate cause of most of the abnormal affections of the brain which are not traumatic, or structural, consists in abnormal states of the cervical and upper dorsal ganglia of the sympathetic nerve, that disease of the lungs are to a large extent referable in the same manner, to abnormal states of the dorsal ganglia, that impaired functions of the stomach and alimentary canal, chiefly arise in abnormal states of the lower dorsal and upper lumbar ganglia, that the functional diseases of the generative organs, both male and female, and the vasular system of the lower extremities, are found to grow out of unhealthy conditions of the lumbar and sacral ganglia and lower segments of the spinal cord." The conditions of the spinal cord in anæmia and hyperaemia constitute an exceedingly important group of abnormal affections in which the amount of blood circulating in it and its membranes, is greater or less than in health, and in which the morbid conditions range between the limits of acute inflammatory disease, or loss of power, amounting to paraplegia. The demonstration of the fact that the sympathetic nerve causes the contraction and dilatation of blood vessels, inaugurated a great advance in physiology; and observations continued by various observers, in the old and new world, have proved that the effect of dilatation and contraction of blood vessels, through the agency of the nervous system, exerts directly an influence upon the chemical and molecular changes, which constitute nutrition, decay, and death, in the various parts of the body. In view of the effects of division and irritation of the branches of the sympathetic, Dr. Brown Sequard said before the Royal College of Surgeons: "I consider that the knowledge of the effects of the paralysis and irritation of the nerves of the sympathetic, opens a new and most important

field in physiology, pathology, and therapeutics. Faithfully, too, are investigators following the true line of progress and experimentation to-day, which are the precursors of distinguished and brilliant success, in these departments. *Apropos*, in connection with this branch of the subject, are the developments made with reference to certain morbid changes in the nervous system in *Diabetes*. This disease has hitherto been regarded as a functional disorder of secretion, rather than structural change. Function is the expression of structure; structure and function are inseparable as cause and effect. Where there is permanent change of function, it follows, of necessity, that there must be permanent change of structure in the organ which has suffered in function. Under this belief, the various organs of diabetic patients have been subjected to a careful and rigid examination; and the nervous system was found to be the seat of important alterations; which fact gained great significance from the discovery of Bernard, that puncture of a certain part of the medulla-oblongata rendered the urine saccharine. The puncture of the medulla, called the "*diabetic puncture*," is believed by Bernard, "to produce nervous derangement of the liver, and as a consequence of this abnormal innervation, not only is the production of glucose augmented, but its conversion into sugar is rapidly hastened." He believes, also, that in the human subject, diabetes mellitus is due to an over activity of the nerves which stimulate the functions of the liver; and "were it possible to galvanize the sympathetic nerve, this would be the best possible method of treating the disease, symptomatically." That this disease does not depend upon simply functional abnormality of the kidneys, and that sugar is not formed in them, is clearly understood. In the examination of several cases as laid before the Royal Medical and Chirurgical Society, by Dr. Dickinson, the results were briefly these: "Certain morbid changes were constantly found in the cerebro-

spinal system." "In all the cases, the alterations are the same, and in the same situations." "The earliest alteration observed was a dilatation of the arteries of the cord." "This was followed by a degeneration of the nervous matter at points external to the arteries." "An extension of the degenerative process, occasioned destruction, and excavation of the tissue around the vessel." "These changes occurred in constant association with arteries, and were found in every part of the spinal cord and brain, attaining their greatest development in the medulla-oblongata and pons-varolii." "The structure of the nervous tissue affected, was constantly the white, while the cells of the gray matter were mostly perfect." "The constant change found to exist in the viscera, was epithelial accumulation in the liver and kidneys." The writer from whom these statements and cases are taken, says, "We are the more disposed to regard the nerve tissue changes as primary, from the fact, that alterations similar in kind, though differing in distribution, occur as belonging exclusively to the nervous system, quite independently of diabetes." Such is the case in the general paralysis of the insane, as shown by Dr. Lockhart Clarke, who has described the lesions which occur in such cases. The conclusion that diabetes is primarily and essentially a nervous disease, accords with much or all that is certainly known of its natural history; indeed the opinion is gaining ground that the disease is due to altered nervous action, altered nutrition of nerve tissue, though no *constant* structural change has been found to account for it. These views are presented here in proof that this disease belongs to the nervous system,—a consideration which may have a practical bearing in modifying its treatment. This leads me to remark, *en-passant*, what was in my mind in reference to the history of other nervous affections, viz. that varied and depressing circumstances in this, as in other forms of nervous disease, produced an injurious and debilitating influence upon

the entire nervous system and its functions, among which may be mentioned, mental emotion, grief, anxiety, great fatigue, the various forms of dissipation, including sexual excesses, which rapidly impair vital or nervous energy. Causes of this nature may readily give rise to modifications of the circulation in the nerve centres, and it has been shown by the revelations of the microscope, that a dilatation of the arteries was the initial change in the pathological conditions. In reference to the theory held as to glycogenic function of the liver, being the cause and origin of sugar in diabetes, I would remark that while we must admit the fact of sugar formation, by the liver, yet experiments fail to detect the presence of sugar in the tissue of the liver, when after death, it is looked for, and we are thus forced to find some other conditions, some other mechanisms, than the sugar making function of the liver to account for the disease; while the admission comes from every source, that the disease is connected with impairment of the nervous centres. In reference to some of the diseases of the liver, we tread upon disputed ground. It is well known that jaundice may be produced by mental emotion, and were it not that bile is colored, or contains coloring matter, which, when distributed in the circulation, stains all the tissues yellow, we never should suspect the liver of being implicated in the trouble. If we consider the importance of this largest gland in the body, and consider how doubtful is the knowledge we possess of its true functions, and consequently of its diseases, and when we remember that all organs of *secretion*, are so far as that function is concerned, wholly under the control of the nervous system, we remark that jaundice, as one of the frequently observed troubles springing from the liver, may be produced, or have its origin in the nervous system. As regards the treatment of diseases of the liver, it is certainly one of the most abused organs in the body, being often chargeable with troubles

with which it has nothing to do. The treatment is therefore often empirical, being based merely upon conjecture, as to whether the arrest of the flow of bile is due to arrest of secretion, inflammation of the bile ducts, spasm, or abnormal quantity or deficiency of bile, or from the regulating nervous influence being suspended, or abnormally altered by the direct action of some agency as mental shock, grief, or fear.

Tetanus.—This disease is presented to us in two forms, viz. idiopathic and traumatic. In the first form the evidence is sufficiently clear, that it has a nervous origin, while the traumatic form is reflex, and the history of its production shows that it is only in certain temperaments in which the nervous system is peculiarly susceptible, or irritable. The two theories, upon which its causes are supposed to proceed, are the humoral and nervous theory. The experiments of investigators to sustain the humoral theory, may be said to have failed, which was to produce artificial infection or poisoning by the use of a pyrogenic material, as pus, or blood from an affected subject. The nervous theory proceeds upon the idea, that disease begins in an irritation of peripheral nerves, an irritation which is propagated in the nervous centres. The force and severity of disease will depend upon the intensity of the irritation, a less degree, only producing excitation and elevation of temperature, while a greater degree will produce powerful irritation, with molecular changes of nerve tissue, great tetanic spasm, persistent and great danger to life. We should remark, with regard to nervous lesions, that M. Bouchard has been able to verify a marked hyperaemia, and evident nuclear proliferation in the spinal cord in tetanic cases. We should not pass from the discussion of this subject without concise reference to the influence of the great sympathetic nerve and its influence in disease and health. Though less successfully studied than the cerebro-spinal system, yet the relations and connections of the great

sympathetic ganglia with each other and with the cerebro-spinal axis, are so numerous and yet widely scattered in the organism, that it is difficult to estimate the influence of this part of the nervous system. The sympathetic is endowed both with sensibility and power of exciting motion, but its influence is less active, in this respect, than is the cerebro-spinal system. The influence of the sympathetic nervous system upon the heart, arteries, veins, and capillaries, in fact in its entire influence upon the circulation of blood, throughout the entire body, is a problem which when fully developed and wrought out, (and upon which the investigations of the entire world of scientific medicine are directed to-day) will throw a flood of light upon the nature of *many diseases*, which, as yet, are surrounded with the mists of speculation and hypothesis. As in tetanus, the remedy indicated for relief would seem to be insulation or division of nerves which connect with the central nervous system: so in some of the painful neuralgic affections of the branches of the fifth pair, it has been affected with only partial relief to the suffering. Prof. Dalton tells us that inflammation of the eyeball is consequent upon section of the fifth pair of nerves, and there are reasons for believing this result to be due to injury of certain sympathetic fibres, which accompany the fifth pair. He says, "If the fifth pair be divided at the level of the casserian ganglion, which is joined by sympathetic fibres from the carotid plexus, or between this ganglion and the eyeball, a destructive inflammation of the eye follows." "If the section be made behind the ganglia, so as to avoid the filaments of communication with the sympathetic, no inflammation occurs." Dr. Carnochan has said that in aggravated cases of neuralgia of the fifth pair, the "key of the operation," "is the the removal or insulation of Meckels ganglion from the encephalon." Of thirteen operations upon this ganglion, pain returned in seven within sixteen months, showing

failure in more than fifty per cent.; in the remaining six the result has not been known. "The question as to the physiology of this ganglion has not been satisfactorily settled, a diversity of opinion exists as to its office, and true nature whether allied to the spinal or sympathetic ganglia." It is believed by most physiologists to belong to the cephalic ganglia of the sympathetic system. The division of the sympathetic, in the neck, produces in animals an elevation of temperature, which occurs with vascular congestion, which conditions approach the history of inflammation, in its earlier stages or conditions, yet not developing its final results. It proves, however, what has so often been observed, that the influence of the sympathetic, possesses a power over the vessels in which "dilatation afflux of blood, and increase of vital properties" are the results. The same steps occur in local inflammation, with this addition; that the increase of vital properties produces later in the history *stasis*, which would complete the series of factors necessary for its existence. It is a fact also observed in the history of these changes, that the "increase of vital properties" produces a vital and direct influence upon the heart action, both in force and frequency. We do not then accept the humoral theory, of even inflammation, which makes all the steps of the process to consist in changes in the vessels and their contents. The vasor-motar control of the nervous system shown in various conditions of dilatation and contraction of vessels, proves how much the nervous system has to do with the circulation of the blood in regulating supply and producing deficiency, while it is known as one of the central facts of the circulation, that the heart receives its power and capacity of continuous action, sleeping or waking, for the whole period of life, from the endowments of the "great sympathetic" nervous system. Many other forms of disease, not herein mentioned or alluded to, are essentially *neuroses*, and should be regarded as deserving special

pathological signification, from that fact. It has been my purpose to present, in continuance of this subject, *illustrations* drawn from various pathological states and conditions, which involve the blood vessels and contents, intended to show that, as yet, the nervous conditions have been too much ignored, and which will, I hope, with the light now being poured upon nerve pathology by investigations, we shall yet have clearer and better views, not only of the general pathology of disease, but, especially, better and more efficient and successful administration and cure. We are to learn yet more fully that art in the cure of disease is to be a fostering and promotion of the perfect physiological state or condition. Disease and injury are to be cured by processes or actions as nearly physiological as possible, till nature, reinforced, can perfect her processes in returning and perfected health. The forces of nature, or physiological forces, may be used as co-relations of the organic forces by the physician in building and restoring the complex organism which has been invaded by disease. To increase force, is one of the prominent and leading indications in all forms of disease which belong to the neuroses. Hence force or power may be found and applied in light or heat as food electricity, or it may be by drugs, and it is the result of constant observation that when persons are thus intelligently supplied they often recover from very severe diseases, with much less aid and often without the aid sought to be given by officious medication.

CHOLERA.*

BY B. WARD, M. D., INDIANAPOLIS.

Cholera has long been known in India, in fact seems indigenous to that country. Its first appearance in the United States, or on the continent of America, occurred in 1832. I am aware that some authors call a disease common in this, and perhaps nearly all other countries, attended with many of the symptoms of Asiatic cholera, by the name of cholera or sporadic cholera, claiming that it is a milder form of the same disease, but the far greater weight of authority is that they are essentially different maladies.

From causes neither demonstrated nor understood, cholera seems at occasional periods to migrate from its native home to the most distant part of the world; visiting the countries in its course in their proper order with its death-dealing influence.

Its onward march is so sure and uninterrupted, that the time of its appearance in any given country can be approximated with a very great degree of accuracy. The first epidemic in this country, was fifteen years reaching our shores; but although its progress was so slow, its gradual advance was so steady, as to cause its predicted arrival in Great Britain, to be received with such confidence by the Government, that two physicians were sent out a couple of years in advance of its arrival to meet it, and learn what they could of its nature and treatment, in order for the better protection of the people. Since then, epidemics of this disease, have been much more rapid in their march; probably, owing, in part, to the much more rapid means of transit for mankind, it being a well established fact, that it inclines to follow the route of public travel; if so, this would tend towards refuting the doctrine of transmission by the

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atmosphere, and favor the one of contagion. Epidemic cholera visited our country again in 1849, prevailing in various localities for a few years then disappearing, returned a third time in 1865, and now bids fair to be with us the present or the ensuing year, and all past epidemics proves that the importance of being prepared for it can not be overestimated.

Whether it is contagious or not has never been fully settled, very able medical authorities being found on either side. That it is at least, in some way *portable* by individuals appears very probable.

Watson thinks it contagious, but not to the extent that small pox and some other acknowledged contagious diseases are. He believes, however, that it is not propagated *alone* by contagion, but by atmospheric influences as well. He also believes that it may be conveyed and communicated by persons not themselves subjects of the disease, but who have been with the sick and thus exposed to its poisonous influences. Others, among whom are Flint and Condie, with equal and even more extended experience in this disease, see nothing to make them believe it contagious.

My own limited observation goes to show that if contagious at all it is but slightly so. That it is conveyed by other means than contagion, I think is pretty well proven by Dr. Dalton in a report of the statistics of the disease as it occurred in New York and Brooklyn, in 1866. It broke out in the two cities about the first of May, in widely remote localities, and there was no evidence to show that the disease was carried from one of these localities to another, nor could the individual cases be traced to contagion from any immigrant passenger, nor to any particular lot of baggage or merchandise, but appeared to follow the arrival of infected ships, and seemed to spring up in each locality independently—and in every case in the poverty stricken districts, and where filth rendered the atmosphere insalubrious.

The increase in the number of cases too is so rapid, that if they were produced alone by contagion, it must be an excessively contagious disease, so much so that demonstration could certainly be made so clear that no doubts would be entertained. Whether it is contagious or not, certain conditions greatly favor its generation and propagation, and the avoidance of these is all important; for this is a disease in which the old adage, of "an ounce of prevention is worth a pound of cure," eminently applies. Bad food, bad air and filth, by their depressing influences greatly favor cholera when it is epidemic, while the opposite conditions are the surest preventives, even among those constantly exposed to it. Bad air, bad food, etc., will account for its more frequent prevalence in the cities as an epidemic. Country people who are not crowded and breathe purer air, while exposed to the same general epidemic condition of the atmosphere, will have diarrhœas or cholera morbus, whereas in the cities the epidemic condition combined with the above named depressing agencies produces fully developed cholera. Although care will not in every case prevent an attack, it will do so in a large majority of them.

Persons who attend those sick with the disease are not particularly prone to its attacks, provided they take proper care of themselves. In a report on cholera in Paris, in 1831, of over 50,000 cases, only 164 were of those whose duties or profession required them to nurse or prescribe for the sick, and there were over 2,000 thus employed. At St. Petersburg, in a hospital with 58 employees, only one had the disease; at Moscow of 123 attached to one hospital, only two had it, and at another where 253 were employed, only four were attacked. These persons no doubt were kept under as favorable sanitary conditions as possible; though what they were we are not informed. One of the most remarkable illustrations of the value of proper sanitary regulations in

preventing the spread of the malady, coming within my observation, is contained in a report to the registrar of vital statistics for New York, by Prof. Hamilton, in 1866, in which he gives an account of its banishment from the Work House on Blackwell's Island, under a pledge to do so within three to six days. There were 800 inmates, and the disease appeared among them on the 28th of July, with 123 deaths in nine days. Prof. Hamilton assumed charge on August 1st, and the last case occurred on August 6th, thus redeeming his pledge of ridding the institution of the disease within six days. For an account of the measures employed, you are referred to the report as given in Flint's Practice of Medicine.

Post mortem examinations reveal certain congested appearances of the mucous membrane of the alimentary canal, with engorgement and enlargement of the peyerian patches and solitary glands, but nothing indicating the violent character or explaining the peculiar phenomena of the disease. The liver is sometimes congested; the gall bladder contains no bile, the urinary bladder is empty and contracted to small size; the kidneys are congested, and spleen contracted and sometimes softened; the membranes of the brain, and the brain itself are generally more or less congested, with effusion into the ventricles, not unfrequently sanguinolent in character. The spinal chord and ganglionic nerves are said to reveal nothing.

The onset of the disease is preceeded in nearly every case by diarrhœa or looseness of the bowels, sometimes for two, three or four days, and again for not more than as many hours. This *premonition* is very constant; in a report of 3,902 cases, by Dr. McLaughlin, a health officer of London, this premonitory diarrhœa was not wanting in a single case, and in all reports the number attacked without a previous diarrhœa is exceedingly small. The diarrhœa is attended usually with little pain or discomfort, and it is often difficult to convince the patient that

it is the precursor of evil, though in a small proportion of cases there is a tendency to vomit. The patient may go to stool without feeling a great deal worse, and is suddenly surprised at the enormous liquid discharge from his bowels, perhaps filling the chamber pot two-thirds full, which on examination is found to be an amniotic looking liquid, in which is seen floating a whitish flocculi, peculiar to cholera, and the combination of the two being pathognomonic of the disease, constituting what are commonly called rice water discharges. This may be repeated again and again in rapid succession, with perhaps vomiting and cramping of the muscles of the lower extremities of the abdomen. Thirst sets in; the pulse becomes frequent and fails in force; the functions of the kidneys become suspended, probably from the fact that the watery elements of the blood are all so rapidly transuded through the mucous membrane of the bowels and stomach. The skin becomes contracted, shriveled and cyanosed in appearance, and the patient tends rapidly to that condition known as collapse. The eyes become sunken, the voice weak and husky, and apparently pitched to a higher key. The surface is colder than natural, and the extremities quite cold. The breathing is usually accelerated, and the breath feels cool to the hand. The patient does not appear to suffer as much as his rapidly sinking condition would seem to indicate—his principal source of complaint being the cramping, and in many cases this is not severe. The mind is usually clear. The discharges do not show any of the coloring matter of the bile. If the disease be not arrested the pulse soon becomes imperceptible at the wrist. He is then in what is called the collapsed stage, when the chances for recovery are decidedly against him. The discharges from the bowels not unfrequently become involuntary and are lessened in quantity, and he gradually dies from asthenia. Though it is said that

owing to the failure of the kidneys, death not infrequently occurs from uræmic poisoning.

When the disease is arrested previous to collapse recovery is tolerably rapid, but those who survive the stage of collapse convalesce very tardily; a low form of fever often supervening, from which recovery is slow and even doubtful.

Treatment.—It is of the highest importance that treatment begin early; moments are precious and none should be squandered in the earliest stage of the disease. Of the host of remedies and plans recommended and employed, none are very effective after the disease has become fully established. The initial stage is preeminently the time for action. The drain from the system must be arrested, though this must be done without exciting the patient; keep him cheerful and quiet; it is better that he use a bed pan without getting up at all. I know that some authors look upon the inordinate discharges as being nature's plan of getting rid of a specific poison, and take it as an indication for a similar plan of treatment, and therefore give cathartics with a view to assist nature in eliminating the materies morbi, and their patients sometimes recover, but I incline to think it is in opposition to the treatment. I was in Cincinnati some two or three months during the prevalence of the last epidemic, and think the treatment pretty generally adopted in developed cases by the regular professions, was calomel in small doses, often repeated, with a view to exciting action of the liver; bismuth, to control vomiting, with ether, chloroform, spirits camphor, etc., for the relief of cramping and stimulation. But it appeared to me that the treatment accomplished very little; whether any other would have done better is a question. In a similar epidemic I would not adopt the plan at the outset. I am confident, however, that I saw numerous cases, in the initiatory stage, arrested by opium, camphor and acet. of lead, combined, and given in form of

pill, frequently administered till the discharges were arrested, and even with tinc. opii camphorati in large doses, combined with perfect quiet of the patient, which, by the way, is one of the most valuable adjustants in the treatment. If water is drank at all it should be very sparingly, it is better that small particles of ice be held in the mouth or swallowed. The attack can be arrested with great certainty if taken in the initiatory stage, and no diarrhœa is too slight to demand attention in cholera times. Opium was not much used in fully developed cases, as far as I could learn, in Cincinnati at the time alluded to, on account of the coma in many cases supposed to have been caused by the retention of urea, and it was thought opium would aggravate the tendency thereto, but I notice that Flint begins by administering a grain of morphine placed dry on the tongue, and if vomiting occur repeats it instantly, and says that the dose should be repeated every half to three-fourths of an hour until the dejections and borborygani cease. In case of the stomach rejecting the medicine, it should be administered per rectum or hypodermically, the latter on account of its prompt action would be the better way, as this plan would not only tend to allay the irritability of the bowels and arrest the discharges, but *quiet* the patient. It occurs to me such a course would be valuable, but would necessitate the presence of the physician to guard against narcotism. After collapse large doses of morphine might be hurtful, but should the discharges continue it may still be used together with astringents, being careful to avoid narcotism. Sinapisms, hot bricks, bottles of hot water, friction, etc., should be used to promote the circulation and produce warmth of the body and especially the extremities. If the patient survive the stage of collapse, the treatment should be of a non-irritating and supporting character, with a nutritious and easily assimilated diet. But it is the prevention of the disease that merits our most ardu-

ous efforts, and into this category enter a list of subjects, either of which contains the material for a paper by itself; such as cleanliness, ventilation, temperance, proper diet, disinfectant, the prompt arrest of diarrhœas, etc. The two later of which should be heralded through the public prints, indicating the best kinds of disinfectants and the proper manner of using them, and in case of an invasion, a few simple prescriptions for the arrest of diarrhœas, given by authority of the board of health.

SUNSTROKE AND ITS SEQUELÆ.

BY C. E. WRIGHT, M. D., INDIANAPOLIS.

(*Concluded.*)

Prognosis.—The prognosis is of course unfavorable if we remember the percentage of mortality, but especially so if there be increasing congestion of the eyes, and convulsions increasing in severity at each recurrence, supervene. But the prognosis must also be guarded after the acute stage is over, for the patient may die from fever.

Cause.—The cause to which sunstroke is usually ascribed, and from which its nomenclature is derived, is the heat of the sun.

The abuse of alcoholic stimulants undoubtedly is one of the predisposing causes of sunstroke, not only on account of the irregular habits of the one employing them, but also from arrest of the process of elimination, which effect alcohol is known to have. Blood already poisoned by retention of effete material is liable to become still more impure, and therefore, when the body is exposed to the continued action of the sun and heat, the cause of sunstroke already acting meets with less resistance than in a healthy individual. Physical ex-

haustion and nervous prostration afford starting points for the disease under consideration.

Constipation is always present in cases of heat-stroke, and of course if existing previously can but favor this accident.

Dryness of the atmosphere, and a peculiar electric condition of the air have been noticed during the times when heat-stroke has been most frequent, and some writers assert that the greatest number of instances occur immediately before a thunder-shower.

Clothing unsuitable to the season, and exposure of the head and neck to the sun's direct rays, as well as a plethoric condition of the body have received their share of attention in the causation.

There can be no doubt however that the greatest factor in creating this affection is super-heating of the blood, whereby that fluid instead of carrying health and vitality to the various parts and organs, becomes poisoned by effete matter, and is converted into a stream conveying disease and death. All the symptoms and all the appearances in the morbid anatomy confirm this supposition.

It is a matter of record (Watson's Practice, p. 63) that even heat may be borne with safety. Sir Jas. McGregor conducted a march from India to Egypt, in 1801, the thermometer being as high as 118° in the tents, and yet there was no unusual effect upon the health of the troops.

The experiments of Duhamel and Tillot in 1760 and 1761, prove that persons may safely subject themselves for a short time to a heat of 260° to 288° F., and that we may breath air heated to 325° F. Drs. Fordyce and Blagden repeated these experiments, and the same degree of heat to which they subjected themselves roasted eggs in twenty minutes, and cooked beefsteak in thirty-three minutes.

But long continued heat acts sensibly on the organic functions of the body. Increased action of the liver and skin, and inversely as it acts upon the skin, the kidneys

are stimulated or depressed in excretion. That urea is excreted by the skin in warm weather, may be proven not only by the proper tests, but by the urinous odor of the perspiration.

In all the reports of cases of sunstroke I have been able to find no mention is made of the state of the urine. Its condition, chemical and microscopic, have not been alluded to, and in this omission it seems to me a great mistake has been made. In the premonitory symptoms we find that the function of the skin has been abolished, and with this abolition, the urine is increased in amount but is "limpid;" incontinence even being one of the symptoms. This increase of urine is followed by partial or even entire suppression, and then the worst symptoms are developed. Do not these facts point to uræmic poisoning as *one of*, if not *the* cause of the difficulty? But further we find that the blood is alkaline, that it is loaded with ammonia probably from the decomposition of the urea; the respiration being impeded, carbonic acid gas is also mingled with the blood, and the fluid becomes decomposed even before death.

Frerichs' experiments show that urea and carbonate of ammonia both when injected into the veins of animals, produce convulsions and coma.

Coma and convulsions are also among the symptoms of sunstroke, and is it not reasonable to suppose that they originate from the same cause—retention of urea and the presence of carbonate of ammonia in the blood.

Morbid Anatomy.—"The morbid phenomena observable after death, are generally not confirmatory of either inflammation or apoplexy."—*Dunghlison*. Had Dunghlison said they are *never* confirmatory of either of these conditions, he probably would have been nearer the precise truth.

According to Tanner, the brain is found to be healthy, but of course this healthy condition is only apparent from a coarse examination. Other writers speak of

finding blood puncta, and effusions of serum at the base and in the lateral ventricles. The cerebral meninges are generally though not invariably congested. The congestion is venous, and especially affects the choroid plexus.

The lungs are spoken of as being extremely congested or in a state of engorgement.

The liver is filled with liquid blood.

Spleen, normal.

Right side of heart greatly distended, and Wood speaks of rigid contraction of the heart.

Blood, always fluid, as it is after death by lightning; generally alkaline, though sometimes slightly acid; corpuscles crenated; and undergoes rapid putrefaction.

Kidneys, very often much congested.—*Tanner*.

It will thus be seen that the morbid anatomy, a description of which I have gleaned from our best authors, is remarkably meagre and therefore unsatisfactory.

The main point dwelt upon, in a pathological view, is the depression of cerebro-spinal and sympathetic nervous force, due to superheating of the blood.

It is earnestly to be hoped that our New York physicians who have recently, unfortunately, had so great an opportunity for study in this field of pathology, will enlighten us in regard to it. And it will be strange, to say the least, if with the appliances and opportunities at their command, they do not discover some reliable pathological points which will direct us to a more rational and successful plan of therapia than we have yet obtained.

By referring to the *New York World* and *New York Herald* of the 5th ult., I find that on the 4th of July, 1872, there were 79 cases of sunstroke in that city, while the thermometer ranged from 94° to 98° F. in the shade. Of this number 18 died in the hospital; but the number of fatal cases can not be correctly stated, as some of the victims were taken to their homes. There were 13 females stricken and eight of them died. Of the 69

males, 10 died. Making a mortality, so far as we can learn from the necessarily imperfect newspaper reports, of about 22.79 per cent. on the first day. There had been cases of insolation occurring for several days, and on the evening of the fourth just after the greater number there were *several heavy thunder-showers*. The greater portion of persons stricken were males, between 21 and 40 years of age, and quite a number were on parade as militia-men at the time of attack.

Ten cases occurred in Brooklyn on the same day. In speaking of drunkenness as a predisposing cause of insolation, the reporter aptly remarks, that those who had been drinking freely, "thought they were jolly when they were merely approaching rapidly towards coma and the Morgue."

Although the majority of cases occur under the direct rays of the sun, and between the hours of 11 A. M. and 4 P. M., yet it is erroneous to suppose that they may not happen at any time.

Dr. Barclay states that in India, persons suffering from sunstroke were brought into the hospital at all hours of the day and night, and alleges that the troops were crowded in quarters, poorly ventilated.

On the Red Sea the majority of the cases occur in the months of August and September, amongst ship passengers who are lying down in their state rooms.

At Rio Janeiro, one sixth of the men on board a French man-of-war were stricken with the disease while in the recumbent position in their bunks.

Treatment.—The grand object of our study of disease is, of course, to find the method of treatment which will save the greatest number of patients from dissolution. As a rule we modify our treatment according to our knowledge of pathology and ætiology, though there may be times when death will not wait for our remedies to exert their "regulation" effect, but rudely tosses the patient into eternity while we, surrounded by our pills

and potions, are revolving some pet theory in our minds. What we want in the treatment of sunstroke, is that which will cure the most cases and in the shortest time. Empiricism in its wildest form has had full sway in the treatment of insolation, and empiricism has done good, in a negative sense at least; for by it have we found that by religiously avoiding venesection, one half the deaths may be averted. It was found by the British surgeons in India, that all the patients who were bled died; whereas, the mortality under other modes of treatment, is forty to fifty per cent. The application of leeches to the temples is attended with but little good, even if it is not of positive detriment. All of our scientific theories must reverentially bow to rational empiricism, if experience determines the proper method of cure. We may, however, by criticism and study of effects decide upon a plan of treatment by a system of exclusion, and wait until our knowledge of cause and condition is founded upon an acceptable basis.

If there were sufficient time during an attack of insolation, the effects of salivation would probably have been tried long ago.

Morehead has divided sunstroke into three varieties, viz: 1. Cardiac. 2. Cerebro-spinal. 3. Mixed. Dr. J. W. Howe, of New York, in his recent work, *Emergencies, and how to treat them*, says they may be classed under two heads, "1. Those in which the nerve centres are principally involved, or the cerebro-spinal variety of Morehead; 2. The varieties which are characterized by exhaustion." But really these divisions seem to have exercised but little influence over the treatment. Dr. Howe recommends the use of bromide of potassium. Indeed it would be very strange if some one did not recommend the use of bromide of potassium, for it was having its "run" when a large number of cases were occurring. And we may expect to hear very soon that chloral hydrate is the very article to be given to patients

suffering from this disease. In fact, chloroform internally and by inhalation, has been already tried and found to do good, especially where convulsions are present.

Equally favorable results have been observed to follow the most diverse methods of treatment. Thus, though the ordinary course pursued is to douche the patient with cold water, yet Dr. Thos. Herron, of Cincinnati, several years ago published the report of a case treated successfully with warm fomentations to the head.

Dr. E. S. Elder, of Morristown, Ind., obtained the best of results in two cases in which he administered quinine in large doses.

The mode of treatment usually recommended and adopted when a person is stricken down with this disease, is substantially as follows: Remove the patient to the shade or into a darkened room—the cooler, the better—strip off all clothing; apply cold water by the continuous douche to the head and chest, and sinapisms or turpentine stupes to the extremities; use the fan freely, to keep the air in motion and promote evaporation; turn the patient on his face frequently in order to free the mouth and throat from accumulations of mucus; administer a brisk purgative, not only for the purpose of unloading the intestine, but for its derivative effect; employ friction with a wet towel or with ice to the body. The cold douche is not to be used in case of failure of the pulse. The wet sheet has been tried but no satisfactory result has been obtained. Emetics are praised by some, but condemned by others. Purgatives and stimulant enemata are to be employed, the latter especially, in coma. Blisters to the nape of the neck are spoken of highly by some writers, but if the patient lives long enough for vesication to occur, he will be very likely to recover at any rate, so that the presence of a blister would, it seems, but add to his discomfort. Afterwards, when the various sequelæ have developed themselves, vesication may possibly be of some service in removing

them, but in the acute attacks they appear to be utterly useless. Brandy and other stimulants have been used, and it seems effectively in some cases. Of course they should be discontinued as soon as reaction takes place, for the reason that they will, very likely, interfere with the process of elimination and increase the febrile action. In several works we are told to give ammonia as a stimulant, but the advice is directly contrary to the indications we derive from our pathology. We see that the blood is already overloaded with ammonia, and instead of adding to the quantity we should rather seek to diminish it, to remove the cause of convulsions and coma. Theoretically then ammonia is worse than useless, and practically we have seen nothing to recommend it. Diaphoretics have been recommended, and this would seem to be more rational counsel—for elimination is what we most desire. Then the most active and powerful sudorific is the one to be sought after. Tanner speaks highly of infusions of tea, alluding to the well known effect of tea of inducing copious perspiration; and we know of nothing so instantaneous in action in exciting the excretory function of the skin as a cup of this liquid. Its slightly stimulant effect is likewise in its favor.

None of the text-books I have searched, have mentioned hypodermic injections in the treatment of sunstroke. Here certainly is a powerful therapeutic means apparently left untested. Morphia to allay pain, which according to the statement of a convalescent patient in Bellevue recently, is "terrific," and ergotin, quinine or strychnia for their specific action upon the nervous system may be tried by this method.

Electricity applied along the spine finds its advocates, though the results expected or obtained are not specified.

Iodide of potassium, we are told, should be given to remove the sequelæ of an attack of insolation, probably for its sorbeficient effect in removing suspected deposits,

or possibly because it is given for almost everything else and is given on "general principles."

Simultaneously with relaxation of the pupil recovery usually begins, so that we may generally look for this as a favorable symptom.

We can not neglect this opportunity to criticize, or at least question the propriety of, such an indiscriminate and irrationally prolonged employment of cold water and ice as some physicians seem to advocate. Cold certainly is at first stimulant in its effect, but if unreasonably prolonged, as it sometimes is, acts as a powerful depressant, suppressing and even suspending nervous action. Our patients may as well die from the over heat as to be killed by the application of cold.

The symptoms of insolation point as we have before stated to acute blood poisoning, but whether this condition is the effect or cause of the depression of nervous force we shall not attempt to argue. Owing to the urgency of the case, we are called upon to act promptly in relieving the *symptoms*, or the patient will die. The excretory functions of the body must be excited, and on the skin, lungs and kidneys therefore must our therapeutic means be expended. The lungs and kidneys being engorged can not perform their duty, and we are left to exert our efforts in restoring the action of the general integument.

Is cold the proper means for accomplishing this desirable end? Cold depresses and suspends the action of the skin, and we can not depend upon it. The mass of poisoned blood is driven from the "harsh, dry and scaly" surface, and still more engorges the vital organs. In preference to the cold douche we may then logically infer that warm bathing is the more proper course to be pursued. Warm bathing we know is an excitant of perspiration, and is certainly a far gentler means and more rational treatment than that generally employed. Ice applied to the surface of a healthy body does excite

a glow, but has the opposite effect in case of disease or nervous prostration. The sudden lowering of temperature, from far above normal body-heat to much below it, can it seems, be but prejudicial. By warm-bathing, with water from 90° to 98° F., may we not suppose that the body will be brought to its natural heat, the harshness, dryness and inaction of the skin be overcome, and the function of elimination restored, whereby the toxæmia will be relieved. If necessary cold water or ice may be applied to the head at the same time. Besides, this plan of treatment would not interfere with internal and subcutaneous medication if deemed advisable. In addition we may use Tanner's treatment, with draughts of hot tea to promote perspiration.

The sequelæ of sunstroke, being of course separate and distinct diseases, need only be mentioned. They are, briefly, general paralysis, general atony, continued fever, pneumonitis, persistent headache, chorea, insanity, mental weakness not amounting to insanity, chronic meningitis and arachnitis. I have seen one case of optic neuritis, and one of neuro-retinitis follow insolation. According to MacLean, (Reynold's System of Medicine) hemiplegia never follows this malady. Epilepsy sometimes follows as a sequel, and the prognosis may generally be favorable.

A CARD FROM WILSON HOBBS.

CARTHAGE, IND., August 15, 1872.]

MR. EDITOR—The last number of your Journal contains a card, signed by J. A. Comingor, M. D., to which I wish to reply as a gentleman.

On the 8th of September last, assisted by Dr. Wishard and others, I resected the shoulder joint of a patient at the Indiana Soldiers' Home, and on the 29th of the same month, Dr. J. A. Comingor, assisted by myself and

others, resected the hip joint of the same subject. At the meeting of the Union District Medical Association, held in Richmond, October 26, 1871, I made a short verbal report of the case, not intending to be explicit. As to the request of Dr. Comingor, I had promised to furnish the press with a report in detail. This statement, however, was intended to give due credit to all the parties interested, and, as announced at the time, to procure some advice for the benefit of the patient. Dr. Wishard, Superintendent of the Home, was present and heard my statement. He knew all about the case, and to him more than any other man are due the honors of these operations.

A few days afterwards I received a report of the meeting published in one of the Richmond papers, wherein there was no mention made of Dr. C. in this case, but both operations were credited to me. I immediately wrote to Dr. Haughton, the Secretary of the Association, calling his attention to the error, and asking him to be sure that it was corrected in all his official reports, by stating distinctly that the hip operation was performed by Dr. Comingor. This was done, as on page 407, January number, 1872, of your Journal, the following statement may be seen in the report of the Secretary: "The exsection of head of femur was performed by Dr. J. A. Comingor, of Indianapolis."

In writing Dr. Haughton to make this correction, I stated that in my remarks on the case I certainly intended to give Dr. C. due credit, but if my words had been misunderstood, or had estrayed my purpose, we would set the matter right at once, as I would not be unjust to Dr. C., or wear laurels not my own. Dr. Haughton wrote me that he could not remember from the few words said about the operation, that I mentioned what was in the communication. I also immediately called upon Dr. Wishard, who was in the case all through, and who had heard my statement, to inquire if I had mis-reported

it. He is the mutual friend of Dr. C. and myself, and I would certainly have been a great fool to mis-state the case in such a particular with him looking me in the face. He assured me that my report was correct, and that I had not omitted to give the proper credit to Dr. C. I asked him to see Dr. C. in his next visit to Indianapolis, and explain the whole matter to him. This he afterwards informed me he had done.

Being advised that Dr. C. was a little sour, I immediately opened a correspondence with him, in which I gave all the above facts, and stated that if I had omitted to make the proper mention of him in the hasty report given, I was ready and willing to make any reparation, which honest justice would approve, that he would dictate; I could not remember the words of my report, but while I may have failed to give him due mention, I was certain, above all things, that I had not claimed the hip operation as my own. By the same mail, I forwarded to the *Indiana Journal of Medicine*, a careful report of the case in detail, which had been submitted to Dr. Wishard and pronounced correct. That report was afterwards published by you in your March number, 1872, and will be found on pages 483-491. Page 488 not only credits the hip operation to Dr. C., but also gives a particular account of just how he did it. This report I asked Dr. C. to call upon you and examine before it went to the compositor. If not mistaken I wrote to you to give him access to it. He immediately wrote me declining to inspect the report in manuscript, that the explanation was fully satisfactory to him, and he begged me to give myself no further concern or trouble about the matter, but to dismiss it from my attention. This was about the middle of January last.

Since then I have made no report of this case to the press or to societies, in which was related the operative procedure or mentioned the person or persons who performed them.

At the May meeting of the same association, held at Hamilton, Ohio, I exhibited the patient whose case had been before reported, simply to show the results of the management. I made no statement of the case, except to show the joints with the sections removed, exhibit the mobility and use of the parts, and give answers to such inquiries as were suggested by members of the Society. I did not say whether the shoulder or hip operation had been performed by me, by Dr. C., or by the man in the Moon. I should have proved myself a greater fool than before had I claimed the hip operation as my own, when the ink of your Journal was scarcely dry, which had twice by my authority credited it to Dr. C., and when, to my certain knowledge, there were some members present, if not all, who would have known it a lie.

The report of the Hamilton meeting, published both in your Journal and the *Cincinnati Lancet and Observer*, to which Dr. C. calls attention, I never saw until it appeared in print. Dr. C. introduces this as evidence that I "stated emphatically" at Hamilton, Ohio, that I resected both these joints.

The more cautious reader will observe that the report states no such thing. The writer says, "Dr. Hobbs presented a little boy," and proceeds to give a short statement of the case, for which he refers to the history given at the "Richmond meeting, in October last," and then observes that "the doctor brought him along to show the result."

In the statement of the case, as given by this writer, there are two errors: First, he credits both operations to me; second, he makes an interval of six weeks instead of three between them. Whether misled in his statement by my report at Richmond, and not having seen the correction nor the detailed report in your March Journal, is not a matter now to consider, as the question now before us is, Dr. C.'s assertion as to what I "stated emphatically" at Hamilton.

The writer of that report penned just what occurred to him as the facts in the case, and I do not hesitate to assert that he will confirm the truth of every word I have here written of the Hamilton meeting, and of his report of it.

As further proof of my mendacity, Dr. C. refers to the proceedings of "Rush County Medical Society." What he may report these proceedings I do not know, but I most "emphatically" deny ever having mentioned the case in review before that Society, or that I have any knowledge that it has been there spoken of.

Now let us recapitulate. I made a verbal statement of the case in question at Richmond, in which I may unintentionally have failed to give Dr. C. due mention. If he so desire I will now admit that my words may have been such, that by my continuous relation to the case during the whole management, the hip operation was fairly, but without express statement, understood to have been performed by me. At my own suggestion it was corrected in the published report of proceedings by the Secretary, and in the detailed report of the case furnished you by me he received due credit.

By our mutual friend, Dr. Wishard, and by a correspondence sought by myself, explanations were offered by me, and accepted by him as satisfactory. Since then I have made no report and given no cause for offence.

By misreading the report of the Hamilton meeting, furnished by your correspondent, he became red with passion, and made the infamous attack upon me found in your last issue.

Mr. Editor, to you, and through you to the public, I will say, that the above statement is the whole truth. No man can gainsay any part of it. All that I have written is upon your pages. Let candid men read the card of Dr. Comingor in the light of this statement, and the reference I have given to your pages, and answer

whether I have "wilfully appropriated that which belonged to another."

That which I have spoken, was nowhere but before the two sessions of the Union District Medical Association, a large body of select gentlemen, representing eight counties, to them I appeal for the truth of this statement. Their next meeting will be held at Rushville, Indiana, on the last Thursday in October next. To that meeting I invite Dr. Comingor to present his charges as presented to the public, where I now demand to be tried upon them. Should he fail to do this, I shall present them myself, and ask the Association to purge itself if I be found guilty, and me, if innocent, from this stain.

Gleanings from Foreign Journals.

BY GUIDO BELL, M. D., INDIANAPOLIS.

Prof. Hildebrandt has treated nine cases of uterine fibroma by hypodermic injections of ergot. His results seem to be of the greatest importance. He used of the watery extract of ergot 3.0 grs., and of water and glycerine 7.5 each. The alcoholic solution causes more pain in the skin. He injected about one drachm daily for several weeks at the lower part of the abdomen, because he found less irritability there. He covered the little wound with cotton and collodion, at the period of menstruation, (bleeding occurred easily), and also after the tenth or fifteenth injection, because the fluid usually ran away. One tumor reaching the navel was removed in fifteen weeks; another, reaching the ribs, was decreased so as to reach only to the navel, and all bad symptoms disappeared. In four cases large decrease and entire relief was noticed. One case did not allow that treatment because of excessive pain; another one, because of the pois-

onous action of the drug. In each case the troublesome symptoms, menorrhagia and fluor albus, disappeared.

Baths and operations, or other local treatment, are sometimes not allowable or impossible, therefore a trial with this method is recommended.—*Berlin Klin. Woch.*

Dr. Wegener has proved, by experiments on animals, that phosphorus in very small doses condenses the bony tissue, for instance on the ends of the diaphysis of the growing bone, or on the spongy tissue of the inner bone, slowly rendering them solid, or on fractured bones. The haversian corpuscles become smaller.—*Ibid.*

The healing power of the steam baths in the Cave of Monsummano is discussed in several journals. Dr. Turchetti had surprising results in rheumatism, gout, secondary syphilis, etc. Garibaldi has been cured there. Address: Ulisse d'Achille, of Monsummano Toscana.—*Ibid.*

Hydrocele and cysts can be treated by a new method of Monod. He takes out some fluid and injects the same quantity of alcohol. The injections, repeated every fourth day, cause no pain nor inflammation. Resorption is effected by altering the fluid.

Dr. Gauchet recommends the following pills in migraine during the monthly discharge: chinin. sulph. 3 grammes; pulv. digital. 1, 5 grammes, fi. pil. No. 30 s., one at bedtime.—*Bul. gen. de Therap.*

Pieces of ice in the rectum in chloroform poisoning are said to be the best.—*Union Med.*

Vomiting and salivation remaining from intermittent fever were cured by tincture of iodine, ten drops thrice a day. Two favorable cases are reported, where quinine and arsenic had failed.—*Memorab.*

Hypodermic injections of tincture of iodine ($\frac{1}{4}$ to $\frac{1}{2}$ of

a syringe full), in enlarged tonsils, and carbolic acid externally applied in acute rheumatism, are recommended. *Memorab.*

Prof. Hutchison has reported at the Congress of German surgeons at Berlin a case, where he unsuccessfully performed the gatrotomy for intussusception of the cœcal intestine reaching the anus.—*Berlin Klin. Wochen.*

Prof. Nussbaum laid free the four lower cervical nerves and stretched them at the spinal column. A soldier was hurt by the but-end of a musket on the elbow and neck, where an abscess was formed. Afterwhile the patient had a severe spasmodic contraction of both pectoralis and all flexor muscles of the corresponding arm, also sensibility was diminished. N. dissected, after every other treatment had failed, all nerves from the axillar cavity, then the four lower cervical nerves from the collar-bone to the spinal column, and stretched them there, which could be done with more ease than was expected. The muscles became softer from day to day, and obedient to the will; the sensibility returned immediately. In this way many cases of paralysis and spasms may be curable.—*Memorab.*

Bromide of camphor is a new remedy in delirium tremens. Three to four grammes (one drachm) in pills is the regular dose for 24 hours.—*Union Medical.*

Hypodermic suction in buboes had good effect in abridging the disease; besides, it has all other advantages over an open wound.—*Wien. Med. Press.*

Dr. Accetella has applied a solution of chloral (5 grms. to 20 of water), to inveterated chancres. He published 96 cases; some of them had been under other treatment for months, but in vain. A. was always successful. Simple ulcers do not require that strong solution.—*Gaz. Med. Ital. Lombard.*

In cases of aneurism of the aorta or heart disease, following pills act as sedative: Digitalis 5.0, muriate of morph. 0.3, camphor 20. Forty pills to be given, one in the morning and at bed-time, slowly increasing the dose.—*Revue Medicale*.

ERRATA.—Among other errors, two have to be corrected on p. 117, July No. I don't mean *hypocritic* method, but the method of *Hippocrates*, who "*separavit medicinae studium a sapientia*." "Hippocrates' medical science is based on facts, not on *sapientia*, i. e. *speculating philosophy*. The sentence, *reparavit*, has the contrary meaning.

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

UPON the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

Book Notices.

PROF. GROSS' SYSTEM OF SURGERY, Fifth Edition, greatly enlarged and thoroughly revised, in two volumes ; published by Henry C. Lee, Philadelphia ; on sale at Cathcart & Cleland, Indianapolis.

It is justly regarded by the profession as the great American work on surgery. It is full of the author's varied, ripe and extensive experience. It contains the very latest discoveries, and is brought up the present in surgical knowledge. It is a complete surgical library. It contains all that is common in surgery, and a great deal that is uncommon, or rarely seen. This edition should be in the library of every practising physician.

BEETHOVEN, by Richard Wagner ; authorized translation from the German, by Albert R. Parsons ; elegantly bound in cloth ; beveled boards ; printed on handsome tinted paper ; price \$1.50 ; gilt \$1.75 ; Benham Bros., Indianapolis.

The English translation of this book renders the wealth of thought contained in it accessible to such thinking musicians and lovers of music as are unable to study the work in the original. As to the work itself, it is not a biography ; but the musician to whose genius Wagner offers this tribute of admiration is treated as a typical man for his art, age and nation. If not to be obtained at your nearest book or music store, address the publishers.

NOMENCLATURE OF DISEASE, with the reports of the majority and the minority of the Committee thereon. Presented to the American Medical Association, at the meeting held at Philadelphia, May, 1872.

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Original Communications.

REPORT OF AN EPIDEMIC OF DIPHTHERIA.

Read before and ordered printed by the Hendricks County Medical Society, in the Indiana Journal of Medicine.

BY JOSEPH A. EASTMAN, M. D., OF BROWNSBURG, IND.

Diphtheria has prevailed as an epidemic at different times from remote antiquity. Historical investigations have shown that it was known to Areteus, (second half of first century, A. D.) There are also descriptions extant of the epidemic in Holland in the fourth century, in Paris in the sixteenth century, and in Spain in the seventeenth century. During the present century it has prevailed in nearly all parts of America, and in some portions of England, France, and in the northern part of Germany.* It has been described at different times and under a variety of names, and confounded as well with several quite dissimilar maladies. In 1789, Bard described the disease under the name of Angina Suffocata, but to M. Bretonneau of Tours is due the credit of first giving the distinctive characteristics of the disease as seen in 1821-25-26, under the name of dipthe-

* Vogel on Children.

ritis, and I believe we should follow his example, and call no disease by this name unless it presents the truly characteristic membrane, for by so doing statistics would give less variation, and diphtheria be placed among the most important and fatal maladies.

This epidemic disease seems to be strikingly irregular in its visitations. "For example, in so far as any account has been given, it was hardly known in this country from the epidemic described by Bard in 1789 until the year 1856; since that time it has prevailed in nearly all parts of the continent. Another peculiarity is, that the disease is often limited in its prevalence in particular sections to circumscribed area, for example, to narrow strips of country."* As I have in the past ten months verified, by personal observation, the epidemic with which we contended, beginning on the line between the counties of Marion and Hendricks, at the point intersected by the line between Boone and Hendricks county, extending along the latter line in a westwardly direction as far as ten miles from the point of beginning.

I also saw a record of five deaths in one family near Crawfordsville, a distance of some thirty-five miles, this place being nearly on the same east and west line as the line between the counties of Boone and Hendricks, along which, and within a distance not exceeding four miles of, the largest number of cases occurred. At one time, about January 10, 1872, the epidemic seemed to have subsided, when suddenly it broke out at a point three miles in a northeasterly direction from Brownsburg, there being no evidence of contagion. Six cases occurred in this neighborhood, with four deaths, the mode of death being from asthenia. Three children were predisposed to enlargement of the cervical glands. My observations would abundantly confirm those of our recent writers,†

* Flint's Practice.

†Martin, in Rankin's Abstract, from Australian Med. Gaz., Dec. 1870.

that "scrofulous children bear the depressing poison of diphtheria very badly. These children were insufficiently nourished. Constructive assimilation, from diseased lymphatics, was bad; destructive assimilation retarded by inactivity of the skin the relative proportion that should exist between the nitrogenous, carbonaceous and mineral food had not been maintained. This continual transmitting through the lymphatic glands of material unfit to maintain their healthy functions, finally reduce the lymphatics to such a state of debility that a slight arrest of the emuctories of the skin causes the glands to undergo inflammatory action. This hyperplasia results in the throwing out of material which, after loosing its water, albumen and saline constituents, undergoes caseous degeneration within the glands, involving more or less of their structure." Having used the word I explain what I mean by the vague term, scrofula.

The next time I heard from the epidemic, there were three cases in Marion county, at a point four miles east of and in direct range with the former line of the disease, i. e. the Hendricks and Boone county line. Two of the cases died: one of them, a boy eight years of age, (for whom I had removed the tonsils for hyperplasia of these glands three years previous,) died from asthenia; the other died from invasion of the larynx.

The next point visited by the epidemic was in Boone county, northwest of Royalton. Three cases and three deaths in one family.

There the disease continued, manifesting all the characteristics of such epidemics, but in the main did its most deadly work near the Boone and Hendricks county line, northwest of Brownsburg. In one family it carried off two children, in another three, in both instances leaving the parents childless; in another it took two, leaving but one, so prostrated that it is an object of pity.

The last new territory it invaded was on White Lick creek, four miles southwest of Brownsburg. These

cases seemed milder, yet death claimed one victim here. As near as I can ascertain, there has been fifty-seven cases of well-marked diphtheria in the localities spoken of, and the death rate has been 60 per cent.

In the fifteen cases I attended in consultation and in my own practice, six deaths occurred from invasion of the larynx. Fully one half of the deaths during this epidemic have been from this serious involvement of the air passages. A number of cases occurred during the epidemic in which all the symptoms were present, with the exception of the formation of the membranes. There were some among them in which symptoms of fever, adenitis, and even a general adynamic condition were well pronounced. Such cases I did not consider as diphtheria; at all events the diphtheritic poison did not show itself in the formation of a membrane.

In some of the families where diphtheria was making fatal work, some of the children would have all the initial symptoms of diphtheria, excessive fever, exhaustion, pharyngitis and adenitis, but no membranes appeared; the whole would take a course like that of diphtheria, and the patient would require a long time to recover. Similar cases occur, however, during all epidemics, i. e. some of the symptoms being present, others being absent. If all our cases of diphtheria were like the last named, minus the membrane, our percentage of cures would be much larger.

I observed in two instances, where diphtheria had taken all the children in the family, except the nursing infants, that they had loss of appetite and great derangement of nutrition for a few weeks, when a most rebellious eruption occurred of the variety lichen pruriginous. I do not call to mind reading of similar sequelae of the disease. However, this variety of dermatitis being due to a vice of assimilation, it finds a fruitful source in the semi-paralysing influence that diphtheria has on the vaso-motor nerves, presiding over the impor-

tant function of nutrition. Our epidemic has been sufficiently extensive to give cases typical of the different sequelæ, nephritis, bronchitis and paralysis, the latter, seeming to me, to follow the milder cases rather than the severer. This may be due to the fact that malignant cases seldom reached convalescence, in no instance has this paralysis failed to disappear under the treatment laid down by Hammond, in his most excellent work on the nervous system. I saw no instance where the disease invaded any other mucus membrane than of the pharynx or larynx. I saw it invariably attacking throats that were blistered, and sores on the feet, hands, and fingers of children; they are seldom without a sore to give the peculiar membrane and thus aid the diagnosis.

Some of my neighbors (pseudo physicians) have been marvelously "fruitful in good works," and have had remarkable success in treating cases of diphtheria whether membranous or not. One, for example, "has had a hundred cases and not a single death from the disease." Very many of his cases died; some when he had the diphtheria cured suddenly "took croup," others "relapsed into sinking chills," etc. All cases of follicular pharyngitis occurring during the past winter, have been (by such men) attended day and night, and many cases of this last named disease have been cured by *nightly virgils* and the administration of *specific* remedies, lauded for the cure of diphtheria.

In this manner, and by such men, we shall for a long time in the future be prevented from obtaining anything like correct statistics of true diphtheria, and honest physicians will receive censure for not being as successful as their illegitimate brethren in curing the malady.

Dr. Flint says, "different epidemics vary as regards the rate of fatality." We would infer this from his assertion that, "in most epidemics there is an unusual tendency to invasion of the larynx, and the amount of

exudation in other situations is unusually large in the majority of cases."

These features were seen with us the past winters. In some neighborhoods nearly every death was from diptheritic laryngitis, in others the amount of exudation in the kidneys and nasal passages, and swelling of the cervical glands was very great, death from asthenia being the usual result. In two cases that I saw the exudation in the pharynx was so small that the children were not disturbed from play until a week had elapsed, when suddenly diptheritic laryngitis set in, and in three days they were buried in the same grave. I opened the trachea of one of them when it was in the act of dying, (as all concerned supposed, three doctors included,) and placed a tube in the windpipe, it drew three breaths through it and sank. We then made further investigations and found that the exudation extended far below the point at which the tube was inserted. The next day, when the second one was nearly gone, I declined to perform tracheotomy for its sake, as there was evidence of extension of the exudation even to the larger bronchia.

As regards the symptoms of this disease they are not what we would wish for as Dr. Alonzo Clark, of New York, remarks, "The initiatory symptoms have no definite relations to the future severity of the disease, or the parts which are to be the seat of the inflammatory exudation. If the name diptheria be confined to cases presenting the characteristic membrane, types of which are best seen in cases which occur during epidemics of the disease, we will find Flint, Wood, Watson, DaCosta, Trousseau, Vogel and Niemeyer, all giving descriptions of the disease that will render it easy of differentiation from other diseases,—the last named author especially. I shall use some of his own language in giving the symptoms, for the picture he gives of disease is as lifelike and as faithful to nature as it is possible for any artist to paint; this he proposes to do in the preface of his work,

and after perusing the work, while attending cases of the disease in question, I think his description most graphic. The disease almost always begins with apparently insignificant and harmless symptoms, in some cases the general health is disturbed for a few days before the disease is fully developed; the appetite is less, the patient complains of dullness, depression and chillness. More rarely the beginning is by a chill, accompanied by nausea and vomiting. at the same time the patient usually complains of difficulty of swallowing, but in most cases this is not greater than in simple follicular pharyngitis, and at times deglutition may remain undisturbed. The affection of the fauces is rarely accompanied by notable pain, hence the liability to overlook its existence. At times there seems to be an anesthetic condition of the fauces. In a large proportion of cases, previous to the formation of the membrane, we would have nothing to guide us to a correct diagnosis except the known presence of the epidemic in the neighborhood or the exposure of the patient to well marked cases of diphtheria. A very suspicious (and so far as my observation would enable me to judge a never absent) symptom is the swelling of the cervical glands lying at the bifurcation of the carotid artery. These glands, according to Luschka, are directly connected with the lymphatic vessels of the soft palate. Not infrequently the persons about the patient will notice this "swelling of the neck" among the first symptoms, the slight difficulty in swallowing having escaped notice. If the lymphatic vessels connected with the soft palate have to transmit "materies morbi" to swell these cervical glands, and the swelling is the first thing to excite the anxiety of the nurse, by the time the physician sees the case he will find, on inspection of the fauces, an abundance of grayish white membrane, sometimes measurably limited to one side. The only opportunity I have had of seeing throats of children affected with diphtheria, previous to the forma-

tion of the membrane, has been where members of the same family have been successively attacked, I calling upon children supposed to be well to see if they were not about to take the disease I was treating in some other member of the family. There is not only swelling of the external glands, but we find the tonsils, soft palate and posterior wall of the pharynx swollen and covered with membrane, which especially I believe I have seen on the tonsils nearly the sixteenth of an inch thick; the mucous membrane of the gums, lips, cheeks and the hard palate remaining perfectly unaffected. The difficulty of swallowing liquids is sometimes marked, they being regurgitated through the nose; this difficulty is measureably due to the incomplete paralysis of the muscles concerned in deglutition. If the exudation be abundant and loose pharyngeal vates occur with respiration especially during sleep. One at all conversant with diphtheria, after recognizing the condition of things just described, adding Neimeyer's language to my own, "can have no doubt as to the dangerous and malicious foe with which he has to deal." It is true, like all other epidemics, in some visitations we are very successful and think we are masters of the disease, only to begin with the next epidemic and be as unsuccessful as our neighbors who are less positive. All of us have observed this in our autumnal typhoids, that it is more fatal one year than another. "I would even look on this disease as a malicious foe;" even in cases where it has begun without a chill; where the fever is slight or entirely absent; where the general health is excellent, so that we can hardly keep the patient in bed; where difficulty in swallowing is insignificant and where the exudation is not excessive, is thrown off without putrescence, and leaves apparently no loss of substance or hemorrhage, we are not at all sure of a favorable termination, or that none of the dangerous accidents will occur, or that paralysis will not show itself when we had thought convalescence

beyond a doubt. If the disease has begun violently, if a chill and repeated vomitings have been the first symptoms, the subsequent course of the disease is usually more severe, notwithstanding the difficulty of swallowing may be slight and the fever not very high. The patient rapidly grows pale, the eyes become dull, the pulse small and frequent, the patient sluggish and apathetic." By this time, in these more violent cases, the putrified false membrane causes a penetrating foul breath; if the nasal mucous membrane participates in the exudation, (and it did in nearly all the cases I saw) a discolored and fetid fluid flows from the redened and eroded nostrils. Testing the urine at this stage, a considerable amount of albumen is usually found. It was present at all stages in all the cases for which I applied the test. The amount was not in proportion to the severity of the case, the amount of local disease, or bodily temperature. This in association with the fact that parenchymatous degeneration of the kidneys is as often found in mild as in severe cases, makes a strong point of argument with some that the disease is constitutional and not local. A peculiarity of the temperature, which I have observed, is that it may remain but little accelerated up to the very period of dissolution; for instance, I took the axillary temperature but a few moments before death, using the utmost caution as to the exactness, and found it to be just what it had been for the preceeding four days, $101\frac{1}{2}^{\circ}$ farh. Dr. Jos. G. Richardson has called attention to the fact that a temperature of 102° or $102\frac{1}{2}^{\circ}$ farh., is not to be relied upon as evidence that the disease will not terminate fatally.* A marked feature in some of the cases that I saw, and some that were reported to me, was the sudden occurrence of death from collapse, without us being able to give any remarkable explanation for its occurrence. The

*N. Y. Med. Record, July 15, 1867, quoted by Flint in his Practice.

above description is greatly modified when diptheritic inflammation of the larynx and trachea sets in, for then the above symptoms are complicated with "hoarseness, aphonia and excessive dyspnoea." "The efforts made by the child to draw its breath are very evident, every muscle used in expanding the chest is brought into action; the child sits up, extends the spinal column so as more effectually to dilate the thorax by lifting the ribs; in spite of these efforts the air can pass but slowly through the rima glottidis." "The desire to draw breath," says Neimeyer, "the efforts to do so, and the desperation which its fruitless exertions produces, are evidenced in the entire being of the child—now it begs to be taken out of bed into the arms of its nurse, and from there to be put back into bed again—the greatest terror is depicted in its manner, it beats about, throws itself hither and thither, clutches at its throat, pulls at its tongue as if to remove the obstacle to its breathing; the face is distorted and bedewed with sweat; the look of a child sick of croup is above all things sad and piteous." This picture is not overdrawn. Add to these already terrible symptoms, the putrid exhalations from the fauces; the ichorous and fetid discharge from the nostrils streaming forth in abundance at each act of coughing, and one is not surprised that the fond mother from the depths of her heart asks the Divine Being to speedily transfer her darling offspring from this *heart-rending* and agonising scene to what, for it, is the sweet repose of death. "These symptoms of invasion of the larynx," says Flint, "are essentially the same as those of true croup," a disease which the French writers place under the head of diptheria; while it is true that their symptoms are the same they are pathologically entirely different, in fact their symptoms are similar only in so far as they are both characterized by the formation of a false membrane.

[TO BE CONTINUED.]

A CASE OF AGUE TREATED WITH PHYTO-
LACCA DECANDRA.

BY WM. LOMAX, M. D., MARION, IND.

Having seen an interesting account of the very successful employment of the above remedy in rheumatism in the last number of your Journal, I feel that it may not be improper to give you my own observations of its effects in relapsing intermittents.

In the autumn of 1846, I was called about midnight to visit Mr. McC., in a sparsely settled part of the Miami reserve. He was a farmer, aet. about 42 years, of an active, nervo-sanguineous temperament, and previous good health. He claimed to have some knowledge of the healing art, and to be specially versed in that department embracing botanic medicines, which he thought sufficiently ample and remedial to relieve all the ills to which human flesh is heir; and he was really happy in a previous faith that an Allwise and beneficent Creator had kindly provided safe and efficient remedies for all the diseases to which the settlers might be exposed, in the copious herbarium in which the country abounded, and that every endemic had its appropriate check-mate in the indigenous plants so profusely distributed to its locality. He was a devout admirer of the wisdom and goodness which he recognized in this order of things, by which the cruel blast might be tempered to the tender sensibilities of the shorn lamb.

There had been an unusual prevalence of malarial diseases this season, and he had been the victim of relapsing intermittent, but was able to do an ordinary day's work every other day. About this time some one came into the settlement from an older part of the State, who had been put in possession of an *infallible cure* for ague. It was none of your calomel and quinine, with which the doctors salivate, rot out your teeth, and fill your bones with mineral poison, which at best only locks up

the disease in your system for awhile, to break out at every change of weather or exposure to cold. It was no equivocal remedy, but sure, certain and permanent. The treatment consisted in thoroughly cleansing the stomach by an emetic of *phytolacca decandra*, preparatory to taking a vegetable pill, equivalent to Sapington's, every two hours until twelve pills were taken. Being purely vegetable, and one important part, if not all of the ingredients employed, being obtainable in the immediate locality where the disease prevailed, Mr. McC. was favorably impressed with the proposed treatment. To facilitate the extraction of its virtues by infusion or decoction in water, the root was to be firmly disintegrated by scraping; and that there should be no uncertainty as to the direction in which it should give its force, it was to be *scraped upwards*. The preparation was soon completed, and freely administered in indefinite quantities. After a time the patient was seized with a severe burning pain of the stomach, sense of heat in the mouth and throat, with but little tendency to vomit. These unpleasant symptoms increasing rapidly, soon became the source of anxiety and alarm to the patient. It was thought by his attendant, who was a novice in the trade, (this being his first case,) that the remedy might have been given too sparingly, and the quantity was increased to hasten the vomiting. But all the symptoms became aggravated, and violent crampings were added to the intolerable pain and burning of stomach and bowels, producing an agony which was truly fearful. His wife, a woman of excellent sense, who protested against the treatment from the first, now interposed and forced him to fill his stomach with a weak infusion of *eupatorium perfoliatum*, which was followed by free vomiting, but only partial and very temporary relief. I saw him about daylight the next morning. The surface and extremities were cold; pulse frequent and feeble; lips, mouth and fauces blistered; burning pain of mouth, throat and

stomach; distressing tension of esophagus and abdomen; dilated pupils and total blindness; the latter symptom prevailed from an early stage of his remedial suffering. I learned from his wife that he had craved vinegar and water from the time his suffering became distressing, and that it had been sparingly allowed him; an article advised by Dunglison for poisoning from this drug.

My treatment consisted of morph. acet. to allay suffering, mucilag. ulm. rub. to soothe the irritated mucous membranes, external warmth and counter irritation, without appreciable benefit, however, for in some 10 or 12 hours he died.

The case caused some excitement in the thinly settled neighborhood where it occurred. The doctor, who was the inglorious hero of the tragedy, was much perplexed with the many curious questions asked by the inquisitive settlers. The explanation most satisfactory to himself of the unfortunate disappointment in which the practice resulted, was, that the direction to *scrape the root upwards* was positive and particular, and absolutely essential to the success of the treatment; and as several members of the family had participated in its preparation, some had doubtlessly disobeyed the injunction, and scraped it downwards, and thereby introduced the confusion into its *modus operandi* which resulted in the very unsatisfactory termination of the case.

The foregoing is the sum of my observations of the use of *phytolacca decandra* in the treatment of disease. I was not favorably impressed with the trial trip of this drug.

That it possesses great power over the living animal economy there can be no doubt. It is too active an agent, even in its crude state, to be indifferently or indiscriminately tampered with, or administered in uncertain quantities. But, like *cantharides* and many other drugs of great perturbing energies, its irritating properties

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may be so attenuated as to render its exhibition not only safe but invaluable in many forms of disease.

I can not say what may be the potency of the Vermont plant which was eaten by the boy named in the article of Dr. Hoagg, or what may be the tolerance of a Vermont stomach to acro-narcotic poisons; but in all candor, I should admonish any red-haired, blue-eyed, freckled Kentuckian to make his will and say his prayers before indulging in a bountiful repast of the raw root of the luxuriant *phytolacca decandra*, that fringes the sources of the Wild-Cat river on the Miami reserve; and I shall regret that any professional delinquency on my part to report known facts, or unguarded commendations of the virtues of this most energetic drug, should contribute to reenact the horrors of the case of Mr. McC.

CATARACT.

BY JAMES THOMPSON, M. D., INDIANAPOLIS, IND.

“When cataract is fully formed in both eyes, may both be operated on at the same time?”

The above question has occupied the minds of ophthalmologists for centuries, and is far from a universal settlement at this date.

The majority who wrote on the subject prior to the last score of years, answered the question in the negative, especially if extraction was the operation indicated. Those who have written since that date are very much divided, and from all we can learn, a vast majority contend against the double operation.

Having recently practiced it on the four eyes of two patients with the highest degree of success, I can not refrain from adding my mite to the affirmative side, hoping thereby to influence others in the same direction.

That the simple report of four cataract extractions,

per se, would be dry and uninteresting I am fully aware, but the question involved, is, we think of sufficient importance to warrant the same.

Mrs. Francis J., aet. 57 years, Muncie, Ind. Hard senile cataract in each eye, over ripe. Patient was blind for six years in the left, and two years in the right eye. The operation was made on both eyes May 29, 1872. It was similar to Von Graefe's modified linear extraction. The puncture and counter punctures were made in the sclerotic, while the apex of each incision was in the upper segment of the cornea, about one milimetre from the corneo-sclerotic junction. The iridectomy was made in each case exactly in the centre of the corneal incision. A small amount of cortical substance remained behind in the left eye, which was removed by stroking the eye ball with the lower lid. This patient was able to see my hand in front of her immediately after the operation, and in four days she could count my fingers. Atropine was (as is usual) instilled into each eye twice a day, but as it caused the patient to become delirious and to tear off the bandage, it was discontinued on the fifth day. On the fourteenth day after the operation she returned home, being able to read the very finest print known, with either eye, with $+2\frac{1}{2}$ spectacles.

James Hubbard, aet. 88 years, residence near Augusta station, Marion Co., Ind. Senile cataract, over ripe, in both eyes; blind seven years in right, and four years in left eye. Operated on both eyes June 24, 1872. The lens with its capsule was taken from the right, but in the left eye the capsule was lacerated with the cystotome, and the lens extracted in the usual manner. This patient made an excellent recovery, was delayed in the city, however, on account of a slight sickness, when on the 18th of July, he returned home, and was able to read common newspaper print with spectacles of $2\frac{3}{4}$ position focal range. He called upon me a few days ago, when he

declared that he could see to count the rails of his fence at a distance of forty rods. Permit me here to acknowledge the valuable aid of Dr. F. S. Newcomer, who kindly assisted me in these operations.

Now for the original question.

It has been urged, that by operation on but one eye at a time, we thereby gain information concerning the constitutional peculiarities of the patient, which is said to be of great value in pointing to the kind of operation which should be selected, and practiced when called to treat the other eye.

For example: One eye may be operated on by Von Graefe's method, the incision being entirely in the sclerotic, and the eye may be lost from fibrous inflammation. Another one by the old flap method, the incision being entirely in the cornea, may be lost through corneal suppuration. Now, to obviate the difficulty, and prevent the loss of both eyes from a double operation, one can make a corneal incision in one and a sclerotic incision in the other eye.

Feebleness of the patient has been urged in support of the negative side. In answer to which I will state, that a more feeble patient than the old gentleman mentioned above could hardly be found; his skin was extremely flabby, his appetite was poor, and his age was extreme, and still a remarkably good result obtained.

When we take into consideration the depressing effect which the loss of one eye from an operation has on a patient, and the reluctance with which he submits to an operation on the other, preferring, as he frequently does, the slight perception of light which he has, to the risk of its total loss from an unsuccessful operation, then are we inclined to urge a double operation upon a majority of cases of sufficient ripeness to justify the same.

Several persons are now in my mind who have lost one eye from an operation, one of whom had a beautiful smooth case, and could see nicely after the lens were

extracted, but rubbed his eyes on the fifth night, during sleep, and thereby caused such a violent inflammation as to result in panophthalmitis and its ultimate loss; the poor man so fears a similar result from another operation that he is unable to take the risk.

Simple perception of light alone is a great blessing to a blind man, even though no object be visible; of this fact many patients have testified. We also are led to infer the same from the reading of "Paradise Lost." Milton doubtless would have considered it a great boon:

" * * * But thou
Revisit'st not these eyes, they roll in vain
To feel thy piercing ray, and find no dawn;
So thick a drop serene hath quenched their orbs,
Or dim suffusion veiled."

To prevent such a calamity one can recommend the double operation, for no case have I heard of, or can I find on record, where both eyes were lost in any case where it has been adopted and practiced.

ANOTHER CARD FROM DR. COMINGOR.

MR. EDITOR—I ask space to reply briefly to a card of Dr. Hobbs, published in September issue of your Journal, and I promise that this shall, so far as I am concerned, end this controversy. I know personal controversies add nothing to the merit of a scientific periodical. Few members of the profession can afford to take any interest in them, and no scientific Journal can afford to publish personal controversies extensively without sustaining serious damage.

Dr. Hobbs says in his report of the case at Richmond, he certainly intended to give me due credit in the case. Did he do it? He attempts to prove by Dr. Wishard, of the Home, that he did. I interviewed Dr. Wishard,

and he was not certain about it; he thought he did, but was not sure.

Several physicians who heard him report the case in Richmond, told me Dr. Hobbs did not give me "due credit." One of this number told me soon after the report was made that he did not, and writes me as follows: "Your exposure of Dr. Hobbs is severe, but so far as I can see deserved."

The same evidence comes to me from members of the profession who heard the report at Hamilton, Ohio. The reporter reports Dr. Hobbs saying that he made both operations. Dr. Hobbs says, "I did not say whether the shoulder or hip operation had been performed by me, by Dr. C., or by the man in the Moon." Does this sound like Dr. H. Is it like Dr. H. to report a case he had operated on and not inform the audience that he did so and so? In writing and speaking, I venture to say, few men place a higher estimate on the capital "I" than he does. Admit that his premises are true, how does the matter stand? The inference is that he did all that was done; he presented the case, and it is but natural that the audience should go away with the impression that the Dr. made both operations.

Dr. Hobbs says the report of the proceedings of the Union District Medical Society, held at Richmond, were corrected at his instance so as to read, "The exsection of head of femur was performed by Dr. J. A. Cominger, of Indianapolis." The correction was made by the editor of the Journal, and not by authority of Dr. Hobbs. The sentence appears at the close of the article, after mention is made of those who took part in the discussion. It should have appeared in the body of the report.

The Dr. says, "By misreading the report of the Hamilton meeting, * * * he became red with passion and made the infamous attack upon me found in your last issue." I did not become angry. I admit I was

mortified to think that a professional brother, to whom I had sustained the most friendly relations, in reporting a case could not give a clear statement of facts and that without disguise. I admire fairness and honesty, one with another, in the profession. Of this individual case I have very little concern beyond that of the welfare of the boy. Dr. Hobbs is welcome to all the reputation he can make out of it. I did not regard it a great operation. I felt then and now feel, that any physician who was prepared to make it could do the work just as well as we did. There was no display of skill in making it, neither was there any display of judgment in deciding upon the method. The patient was so much exhausted that amputation was out of the question; excision was the only operation that offered success. These operations have been successful in saving the boy's life and providing to him useful limbs, and with him I rejoice.

I have said all I care to say upon this subject, and so far as I am concerned this unprofitable discussion is closed. The Dr. can not say anything that will provoke me to resume it. I close with the kindest feelings for the Dr., and hope in the future he will be more accurate in making verbal statements than he has been in the past.

J. A. COMINGOR, M. D.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, INDIANAPOLIS, IND.

TATTOOING OF THE CORNEA.—We reproduce an article on the above subject, by L. Von Wecker, of Paris, printed in the last number of the Archives of Ophthalmology and Otology, for the purpose of adding our experience in such treatment.

Dr. Wecker says: "It is an acknowledged fact that

foreign substances may be introduced into the tissue of cornea, and remain there for a long time without producing any irritation. How often we see abnormal coloring of the eye, caused by the injudicious use of preparations of lead and silver in the treatment of ulcerations of the cornea, and how little has this peculiarity of the cornea been made use of for therapeutical purposes.

“That we can introduce small quantities of slightly irritating substances into the cornea without the liability of producing any considerable reaction, was made apparent to me by the following observations: 1. I observed that in workmen, wounded by the explosion of mines, the grains of powder remained in the cornea without producing any remarkable haziness in the surrounding tissue. 2. I have often treated children, who have had steel pens stained with ink stuck into the cornea, without the ink left there producing any appearance of irritation.

“My first experiments to avail myself therapeutically of this tolerance of the cornea, was to give a black coloring to disfiguring white opacities of the cornea. Ophthalmic surgeons are often requested to remove such leucomata, which even from a distance make a disagreeable impression upon the observer, and how often have the surgeons had to declare their inability to do so. Tattooing of the spots enables us to remove the disfiguring in such a satisfactory way that it requires a very attentive observer to notice a difference in the appearance of the two eyes. I have already given it as contrary to my opinion that the object is not only to give to these specks a grayish tint, but that the purpose of the treatment is to color the opacities so entirely black, that after the lustre of the cornea has been restored by an even coating of epithelium, such a central colored spot gives to the observer the impression of a black pupil. With some perseverance on the part of the physician and patient, such a result may be obtained in from six

to eight sittings, and I have often presented to the visitors at my clinic such patients, who have been operated on to their satisfaction. It seemed to me in the beginning of my experiments, that tattooing of the cornea could only be employed to obtain most satisfactory cosmetic results, when my attention was drawn, through some of my patients, to another use of this little operation. I have often made the operation in central adherent leucomata after having formed an artificial pupil, more fully to restore the visual power. Nearly all patients thus operated upon, in whom the central extreme haziness extended to that part of the cornea which was opposite the artificial pupil, and in whom I made the tattooing upon this grayish part of the cornea, said spontaneously that after the completion of the tattooing, the visual power of the eye operated on had considerably improved.

“There is no doubt that the suppression of the diffusion of light plays the part of a stenopæic glass. I decided, therefore, for opitcal purposes, in central semi-transparent opacities, which are so detrimental to visual acuteness, to make a small pupil downwards and inwards, and then to color entirely black the central grayish part of the cornea. I need scarcely mention, especially in a darkly pigmented iris, that tattooing removes the peculiar dull expression caused by such central specks. The number of cases treated by me, in this way, is yet very limited, but the results obtained appear to me highly satisfactory, and I think we may find in this operation, in certain cases, a substitute for the stenopæic glass, which patients dislike so much to wear.

“As regards the method itself, I made use of a small chisel-shaped knife, such as is used in England for removing foreign bodies from the cornea. The knife must be ground to a fine point like a needle, fix the globe, and have always in readiness two such knives, in order to execute quickly the 10 to 20 punctures under the epithe-

limum. These punctures must be made very close to each other; and when the opacity is thickly sprinkled with punctures, then I color very carefully the interstices at the following sittings. I have never noticed any violent appearances of irritation following the little operation, and most of the patients resume their business immediately. To obtain the most satisfactory results in extensive leucomata, we must have from six to eight sittings. We never find any resistance on the part of the patient, the operation being so painless that they are not disturbed in their business. Softness of the cicatricial tissue facilitates the imbibition of the coloring matter; but old hard cicatrices, especially those mixed with chalky material, make the operation more difficult, and require more frequent repetitions.

"I do not doubt for a moment that tattooing of the cornea will find a definite place in the treatment of eye diseases, on account of the painlessness of the method, the absence of any danger, and the ease of its execution.

Even the fear expressed by some patients that the results of the operation may disappear in some years, is easily overcome, on account of the want of pain, and the little time required for a repetition of the procedure."

We have thus given in full Dr. Wecker's article, and have to add that our experience entirely confirms all that the originator claims for his little operation, and even more, as we have discovered. Not only is it valuable for its cosmetic effect and for the lessening of the diffusion of light by leucomata, but for another reason which we will illustrate by a case operated upon. A patient who had formerly suffered from extensive ulceration of the cornea of one eye, applied for the relief of central staphylomatous bulging of the cornea and the annoying diffusion of light, caused by the opacity which covered the entire lower half of cornea. The eye had been treated with pencillings of astringent and irritating collyria for years, under the vain hope that the protru-

sion would at least be held in check, if not entirely overcome.

The upper half of cornea was perfectly clear, and vision good in upper half of field of vision. Wecker's operation was proposed, and was readily acceded to by the patient. After only five sittings the opacity was made black, *the staphyloma has greatly decreased*, the diffusion of light has been so much decreased that the patient now keeps the eyelids open in strong light, (whereas before closure of the lids was almost a constant habit,) and vision in the operated eye has decidedly improved.

The operation is almost entirely painless, and remarkably little irritation was felt after each sitting. The irides being very dark, the eye now presents to the observer but little if any deformity. The lessening of the staphylomatous bulging, which has been so marked as to attract the attention of several physicians who witnessed the operation, is the most remarkable feature of the case; and is an effect not spoken of by Dr. Wecker. No paracentesis was made during the operations, perforation being carefully guarded against. Instead of the knife used by Dr. Wecker, an ordinary straight cataract needle was employed.

We have two other cases now undergoing the process of tattooing of the cornea, which also promise equally favorable results.

Proceedings of Societies.

PROCEEDINGS OF INDIANAPOLIS ACADEMY OF MEDICINE.

REPORTED BY S. C. TOMLINSON, M. D.

Dr. Cominger.—The subject I present for consideration this evening, is Inguinal Hernia. There are two principal varieties of this form of hernia, external or oblique, and internal or direct.

External or oblique inguinal hernia is the most frequent of the two, and follows the course of the spermatic chord protruding through the external opening; it is called external when the neck of the sac lies external to, or to the illiac side of the epigastric artery. The internal or direct does not follow the course of the cord, but protrudes through the abdominal wall to the inner or pupic side of that artery.

Inguinal hernia may be complete or incomplete; complete when it passes through the external opening, incomplete when it does not.

I need not consume time in telling you how to diagnose a hernia; you are doubtless familiar with the symptoms which invariably accompany it. The diagnosis will be easily made when you take into consideration the causes and circumstances that give rise to the malady. You can scarcely confound hernia with diseased testicle, a tumor or varicocele.

Hernia may also be divided into reducible and irreducible. We call it reducible when no pathological change has taken place resulting in adhesion, since the protrusion of the gut; when these changes have taken place we regard it as irreducible.

As a rule hernia is easily reduced; the patient frequently effects reduction without the aid of the surgeon, but occasionally he fails; the manipulations and position he has heretofore adopted are inadequate; the parts become tender, swollen and painful, inflammation exists and there is strangulation of the bowel. This is a dangerous state of things, and requires the surgeon to be prompt and determined in his course to save his patient. Unless the strictured bowel be speedily relieved it must perish.

In the beginning of these remarks I said as a rule, reduction was easy to accomplish. I am now tempted to say that reduction can always be effected if the proper manipulations be resorted to, provided the pathological changes

mentioned are not present. I do not wish to promulgate this opinion, though I believe it and act upon it. Since a resident of this city I have been called eight times to operate for strangulated inguinal hernia, and have operated upon one only, and I am satisfied had I manipulated properly and persistently I would have succeeded in this case without operating. I, however, cut through the integument and satisfied myself there was no stricture, made another effort by taxis and quickly succeeded, the patient recovered.

The advice given by many surgeons, is to make an effort at reduction by taxis, but insist that it should not be prolonged, insisting that handling incites inflammation. I believe this to be dangerous doctrine, it is calculated to intimidate the surgeon and create distrust in the method. I believe that a vigorous and prolonged effort should be made, and if properly made I will venture the opinion that forty-nine cases of every fifty—perhaps all will succeed. Obstacles sometimes arise which prevent reduction when strangulation does not exist. In the scrotal variety the bowel may become full of gas or fecal matter; in such condition the bowel and contents are brought to the opening, the bulk is too large to pass through, then the contents must be made pass first, followed by the bowel. If this is found to be impracticable, the bowel should be tapped and the contents withdrawn, when reduction will easily be effected. Several cases are on record where tapping was resorted to, reduction following and no damage ensuing.

If efforts at reduction by taxis fail, the canal may in some cases be enlarged by invaginating the integument, and passing the index finger up to the point of stricture, forcing it within and dilating it. In case an operation becomes necessary, this process of enlarging the canal is preferable to enlarging by the use of the knife.

I observe a few simple rules in taxis which it may not

be unprofitable to relate. The patient should be in an accessible and convenient position for the surgeon, (a comfortable position for the surgeon I regard essential to success,) the patient placed in the lithotomy position, except the leg corresponding with the hernia should be adducted towards the mesial abdominal line; the hernial tumor is then brought up to the mouth of the canal and firmly held there with one hand, and directed with the other to prevent overlapping of the structures, gradually increasing the force until dilatation is effected and the hernia reduced. The amount of force necessary can only be determined by the operator; I can only say that a great amount of power, if found necessary, can be safely applied if properly directed. The kneading process so commonly practiced is a useless mode, and is likely to do damage by exciting inflammation. Many failures are due to this indefinite manner of manipulating. As to the use of anesthetics the surgeon must be the judge; their use in some cases facilitates the reduction, and after a fair trial without them they should be resorted to.

Of the radical cure of hernia, I shall say but little. My experience has not been sufficient to warrant me in speaking authoritatively upon this subject. I have operated upon but one case by invaginating the scrotum, passing a needle through the abdominal wall, and securing the ligature externally. I got adhesion which appeared firm, but in less than three months the union gave way and the hernia returned as before.

There are other operations resorted to for the purpose of effecting radical cure, but so far they have not succeeded sufficiently to warrant their adoption. The truss has now and then effected a radical cure, and is well adapted to the treatment of hernia in the young subject and recent cases.

Dr. J. Thompson.—Concerning the diagnosis of hernia, the essayist has in my opinion made it entirely too easy a

matter. That an old and uncomplicated case can be readily diagnosed all will readily admit, but do we not often have recent cases where the inflammation of surrounding parts runs so high as to prevent the possibility of direct demonstration. Hormatocele, hydrocele and hernia I have seen on the same side of one patient.

The point, however, to which I desire to call attention, is the radical cure. I claim the invention of an instrument and treatment which has been as successful as any yet tested. During the year 1864, at Ft. Halleck, Columbus, Ky., I operated on seven cases as follows: The scrotum was pushed into the inguinal canal and held in position by a hollow wooden cylinder; a needle armed with a ligature, to which was attached a minnie ball, was thrust through the scrotum and brought out in front and a little above the internal abdominal ring; the canula was then split and removed, the ball and invaginated scrotum were drawn up tight and the ligature fastened over a button; a compress was placed over the canal and allowed to remain three weeks. An effort was then made to remove the ball at the external ring, but adhesions were so great that we were obliged to cut it out above the internal ring. The patient was sent to duty in two months cured. Six other cases were operated upon, five of which were cured, one failed owing to the ligature breaking on the third day, and patient refusing to submit to second operation. One of the cases subsequently died from aneurism of the abdominal aorta, (specimen in museum of Indiana Medical College,) affording convincing proof of strength and permanency of adhesions.

Dr. Todd.—We should be careful about indiscriminately putting back a strangulated hernia. If the bowel be returned in a gangrenous condition it is almost certain death, whereas if the surgeon ascertains that gangrene has taken place he may produce an artificial anus, which is a little better than death.

Dr. Bigelow.—The kneading which is often the result of non-intelligent interference is frequently very disastrous. I do not mean by "non-intelligence" that one man has more intelligence than another, but that sometimes the best surgeons are deceived. They think the hernia has been reduced when it has only been pushed back into the cellular tissue and held there by a pad. I saw my preceptor once remove over four ounces of omentum that had been protruding for fourteen years. Frequently strangulated hernia is cured by hanging the patient up by the heels; I have done this three or four times.

REPORT OF SPECIAL COMMITTEE.

MR. PRESIDENT:—Your Committee appointed to examine the specimen taken from the face of ———, by Drs. Parvin and Bigelow, would report that they have made a microscopical examination of, and have analysed the same. Unmistakable evidence of a formation, similar to cancellated structure of bone was found in portions of the sections used, the remainder was composed of granules—no haversien canals, canaliculi, etc. Upon chemical analysis phosphate with small amount of carbonate of lime found, substance charred upon heating. About half of specimen destroyed upon incineration, showing 50 per cent. organic matter.

Upon the literature of the subject, we present the following:

Todd and Bowman says: "Granules aggregate and form into bone with lacuna, haversien canals, etc." Kalloger, "In the cancellated structure haversien canals are very rare." Talstein, "An osteophyte is the ossification of tissues around bone." Stanly, "Bony growth appearing in places in quick succession, there is reason to suspect hereditary predisposition." Green, "The ossific matter is held in solution by carbonic acid, the excess and posphate, etc., are deposited." Williams, "Thinks

the deposit due to a chemical election of tissue for ossific materiae."

The question presented to your Committee is, "Was this a calcarius concretion or true bony growth? Your committee do not pretend to decide, but leave it for your consideration. The whole subject of formation of bone is brought before us. Might it be simply the retention of inorganic portion, with portion of the organic mechanically mixed of the sudorific glands, one or more of which was deranged in action and enlarged. Or does the organic matter, formed together with the signs of organization, place it with true histiological growth.

DR. STEVENS,

DR. DAVIS,

DR. BIGLOW,

Committee.

BRAINARD MEDICAL SOCIETY.

The Society met in the rooms of the Young Men's Christian and Library Association, in Logansport, Ind., June 27, 1872.

The President and Vice President being absent, the Secretary called the Society to order, and after Dr. Glazebrook, President elect, delivered his inaugural address, he took the chair. Members present, L. D. Glazebrook, James Thomas, I. B. Washburn, W. T. Cleland, J. B. Moore, J. B. Hoag, H. Garner, G. W. Nafe and W. H. Bell. The minutes of the previous meeting were read and approved.

On motion, Drs. Wm. Lomax, Williams and Ayers of Marion, Dr. Dickens of Wabash, Dr. Ballou of Burnett's Creek, and Dr. Buckner of Kentland, members of their respective County Societies, were elected honorary members.

On motion, the physicians present not members of any

Society were invited to participate in the proceedings of the meeting. They were, G. N. Fitch, A. Coleman, A. B. Buchanan, J. Herman, J. M. Justice, R. Faber, and J. H. Shulz of Logansport, and Dr. J. A. Adrian of Onward. Later in the day, Professors Stevens, Todd, and Comingor of Indianapolis, Drs. R. Q. Wilson, E. A. Armstrong, I. C. Johnson, Wm. Scott, H. C. Cole and W. K. Mavity of Kokomo, Dr. Higgins of Peru, and Drs. J. A. Meek and O. C. Irwin of Bunker Hill, put in an appearance.

Dr. Hoag read an essay relating to the "Duties of Physicians," which was discussed at length by Drs. Fitch, Ayers and Lomax.

Dr. Ayers opposed the liberality of the paper toward practitioners of medicine who *claim* superior knowledge and great success in practice, and characterized them as "humbugs."

Dr. Lomax said he opposed the paper on the ground of its countenancing irregulars, and the author seemed to complain of the public. He thought the medical profession was as well patronized as it deserved. The truth is, the public expects too much of physicians—things they can not do. He had full confidence in the efficiency of remedies in many diseases, but in many individual cases he as fully felt his inability to meet the expectations of his patrons, since with our present knowledge it is an impossibility. He thought the men who go about the country telling the people that they could effect cures that are impossible, are worse criminals than thieves or robbers. They deceive without the honor of a thief. The thief knows that if detected he will be punished, the quack-doctor will not.

Dr. Bell read an excellent paper on "Neuralgia of the Heart," which was discussed by Drs. Fitch, Hoag and Bell.

Dr. Washburn read a paper on Epidemic Meningial, Typhus, or "Spotted Fever," which gave rise to a very

lively discussion, participated in by Drs. Todd, Fitch, Scott, Comingor and Stevens.

Dr. Dickens invited all present to attend a meeting of the Wabash County Medical Society the next day.

Dr. Mavity extended a like invitation to attend the Howard County Society July 2d.

Adjourned until 8 o'clock, p. m.

At the evening session Drs. Stevens, Todd and Comingor favored the Society with short addresses.

Dr. Stevens' address related to some of the things necessary to the greater efficiency of the medical profession. He said physicians ought to be close students, faithful workers, always attending to every duty promptly. He urged upon them the necessity of county organizations for mutual benefit and improvement.

Dr. Todd also advocated organization. He said, if physicians would organize they would be better able to serve and protect the people and themselves. Many persons had a mistaken idea about medicine. They thought there were several systems of medicine, when there is but one science of anatomy, physiology, chemistry and Materia Medica, and only *one school* of medicine. The man who understands these sciences, with the addition of surgery, obstetrics and therapeutics, is *the physician*. The physician is the true student of life, the man who works for humanity; yet too many persons do not recognize the difference between the scientific man and the ignorant pretender, who has never studied a day in his life.

Dr. Comingor urged the necessity of a law legalizing dissections. The law at present punishes a man for procuring subjects for dissection in order that he may understand his business, and punishes him for malpractice if he does not understand it.

Dr. Cole resumed the discussion of "spotted fever," which was participated in by Drs. Bell, Cleland, Hoag, Wilson, Glazebrook, Thomas and Washburn.

In conclusion Dr. Washburn said, that if physicians

would organize in every legislative district, they could soon have such enactments upon our statutes as would legalize dissections and regulate the practice of medicine. He said that in the last session, when an "Anatomy Bill" was introduced, a member made a motion to expell it from the House, that when a bill regulating the practice of medicine and surgery, and was afterwards submitted to the Indianapolis Academy of Medicine, the Academy could not agree upon any mode of procedure in the matter. He said that if the fifty physicians in each representative district in the State, could not control their respective members, they ought not to enjoy the benefits of a law.

On motion, adjourned to meet in Winamac, Indiana, October 3d, 1872.

I. B. WASHBURN, Sec'y.

REPORT OF AUTOPSIES MADE AT CITY HOSPITAL.

BY THAD. M. STEVENS, M. D., PATHOLOGIST.

N. Smith, entered Hospital June 3, 1872; died, July 27. Sections by Drs. Marsee and Tomlinson. External appearance, left leg and abdomen much swollen; bedsore upon both gluteal spaces; abdomen examined; large tumor, extending from pubes to point of enciform cartilage, and from one inch to right of spinal column to left spinous process of illium, uterus and right ovary natural; left ovary enlarged and congested; position of uterus to the right; psoas major and minor involved; tumor attached to promitory of sacrum, and upward for space of three inches; weight 12 pounds.

Symptoms before death.—Complained of pain in left leg; could not lie on left side; respiration being impaired; in November, 1871, had intermittent fever; was in hospital before with rheumatism. Microscopic examination of tumor by Henry Jameson, M. D.; nothing found but vessels, fat globules and connective cellular tissue, tumor therefore adipose.

Reviews.

TRANSACTIONS OF THE INDIANA STATE MEDICAL SOCIETY, 1872. Twenty-second Annual Session.

Be it said in the beginning that the Secretary and Publishing Committee have, from year to year, improved the general appearance of the annual report, and it now comes to us in good form—clear type and tinted paper—the whole work has been well done. We hope the next report will have the additional attraction of good binding, which will cause the report to be read and placed in the library of the physician, instead of being negligently cast aside (owing to paper cover) and be forgotten,

The address of the President, H. P. Ayres, of Fort Wayne, had more in it which we could commend than most addresses of the kind—it was short, kindly and suggestive. In alluding to the work of various committees, which have from time to time been printed and lost amid the sea of waste paper, he suggest that matter of such importance as epidemics, contagious, peculiar types of disease, etc., be recorded in a separate book. and thus preserve much valuable matter that is now lost and the laborer forgotten.

A case of Hydroceles with Cartilaginous thickening of the Tunica Vaginalis, by S. E. Munferd, Princeton, Ind. The only point in this paper that is peculiar, or that would attract attention, is the statement of cartilaginous thickening, which is overlooked however in this paper, as no cartilage is mentioned as having been found; otherwise we see a case of hydrocele, caused by injury many years ago, and being large caused much thickening. The case was well treated however, and recovered.

The next paper, by R. E. Haughton, M. D., of Richmond, Ind., on the Pathology of Malignant and Semi-Malignant growths, shows extensive reading, but lacks the simplicity of expression which should mark papers

drawn from the writings of special authors—who cover clouded impressions with a tissue of high sounding names, built up with words whose roots are both Latin and Greek, intertwines and run clear back to the ultimate primordeal cell nuncleolus of germinal linguistic expressions. Now a large number of practioners would be benefitted by Dr. Haughton's paper if they had read all the works referred to in it.

Whilst speaking of professional ambiguity—or papers written as men never talk—we might mention a paper on "Anomalices of Refraction and Accomodation." A paper that shows the work of the specialists, written in just the right style for a meeting of Occulists, and in a manner calculated to advise all the general practitioners that they know but little about such matters, and had best send them to the specialist.

"Out of old fields cometh all this new corn,
Out of old books cometh all these new things
That men must learn."

In the "History of an Epidemic of Parotitis" in Switzerland county, by Lucien J. Woollen, M. D., of Moorefield, Ind., we have a plain straightforward statement of the author's observation, and is valuable as a specimen of truthful narrative, intended to contribute to medical knowledge and benefit mankind, and is a good example of a sensible and useful contributor.

Another paper of the right stamp, with the true ring of the genuine metal of which a physician should be made, is "Researches in Arsenical Poisoning," by T. C. Van Nuys, M. D., Evansville, Ind. We can not give this paper as extensive notice as it property deserves, but must give a resume of the experiments and conclusions drawn therefrom :

MODE OF ADMINISTRATION.	NO. OF DOGS OR CATS.	DURATION OF POISONING.	RESULTS.	REMARKS.
Into stomach.....	6	Over 4 days.	Ulceration.	In some of these cases it would have been difficult to diagnose from chronic ulcers of the stomach.
" "	1	4 days.	No ulceration.	
" "	1	3 days.	One small ulcer.	
" "	2	In 36 hours.	No ulceration.	
Into rectum.....	1	20 days.	Ulceration.	
" "	1	16 "	"	
" "	1	5 "	No ulceration.	
" "	1	8 "	Ulceration.	
Into subcutaneous tissue.....	6	1½ hours to 18 days.	No inflammation of stomach or intestines.	But one injection in each of these two cases.
Into subcutaneous tissue.....	2	1½ and 2½ hours.	No inflammation of tissues where introduced.	
Into stomach, rectum and s. tissue.	19	1½ hours to 29 days.	Narcotic action some time during poisoning.	
Into subcutaneous tissue.....	1	11 days.	No narcotic effect.	

From these researches the following conclusions are drawn :

1st. When arsenious acid is introduced into the stomach and death results therefrom, ulceration of organs is a common result; particularly is this true if the poisoning lasted over four days.

2d. Arsenic when introduced into the blood in poisonous quantity, otherwise than by the alimentary canal, does not produce inflammation of the stomach and intestines.

3. Arsenic however introduced into the blood in poisonous doses acts as a mild narcotic.

4th. Arsenic when introduced into the blood in large quantity will produce death within two hours without giving rise to inflammation, but in smaller doses it causes death by producing inflammation.

In addition, we would say that few papers, alas too few, of these kind have ever reached the reports of the State Society.

Some of the vexed questions of "Medico-Legal Science," were presented by Thad. M. Stevens, M. D., Indianapolis. The paper was an expression which

almost every physician could and would say amen to, but unfortunately the legal is not in unison with the medical, and the paper suggesting, well—yet can not give a solution of the difficulties. So we must go on and laugh at the stupidity of lived and self constituted experts, be amused over hypothetical cases, and let mal-practice correct itself. But medical coroners could be generally elected, instead of the ignorant boobies who usually fill the office, if the doctors of each county united to that end.

The next is a report on "Disease of the Eye and Ear," by C. E. Wright, M. D., Indianapolis. Although this paper is by a specialist, the author makes it a point to show "why the general practitioner should not abandon the study of the different specialties, etc." We can heartily commend the style and matter of this report—being plain, concise, and useful.

W. B. F.

Book Notices.

A year's book of Therapeutis, Pharmancy and Allina Sciences, by H. C. Wood, M. D., Professor Medical Botony, University of Pennsylvania. Wm. Wood & Co., New York. A very convenient work for the general practioners.

On Food, a lecture delivered before the Society for the encouragement of Arts, Manufactures and Commerce, in the months of January and February, 1868, by H. Letherly, M. B., M. A., C. H. D., etc., second edition. Wm. Wood & Co., 27 West Green street, New York.

New Treatment of Venereal Diseases, and of Ulcerative Syphalitic Affection, by Iodoform; translated from

the French of Dr. A. A. Izard, by Howard F. Doman, M. D. Boston, James Campbell, 1872.

A Manual of Qualitative Analysis, by Robert Galoway, F. C. S., Professor of Applied Chemistry in the Royal College of Science for Ireland, author of "the Second Steps in Chemistry," "the First Step in Chemistry," etc., from the fifth re-written and enlarged London edition, with illustrations. Philadelphia, Henry C. Lee, 1872; pp. 402. A very complete manual, no one who pretends to study thoroughly qualitative analysis should be without it.

Hysterology, a treatise, descriptive and clinical on the diseases and displacement of the uterus, by Edwin Nesbit Chapman, M. D., Professor in Long Island College Hospital. New York, Wm. Woods & Co., 27 West Jones street. This work is the result of clinical instructions before the classes of Long Island College Hospital, and is of such a character that we think no gynecologist can do without this "Hysterology," "a new word" which the author has "ventured to coin."

Wood's Magazine, for October, appears in an entirely new dress, including new type, an improved make-up, and a much handsomer cover. As usual, its contents are fresh, sprightly, and interesting. Two tinted crayon portraits, Hope and Joy, are furnished to subscribers. Address S. S. Wood & Co., Newburgh, N. Y.

THE Young Folks' Rural, is a novelty among publications for Young People, entirely different from any other in style and character. Cash prizes are given for best "compositions." Write for a specimen number and particulars, which will be sent free. Terms, \$1.50 per year—\$1.00 in clubs of four and more, and every subscriber receives a pair of beautiful chromos as a gift. Splendid premium to those who form clubs. Address H. N. F. Lewis, Publisher, Chicago.

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

UPON the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

WE see that Prof. Parvin has retired from the University of Louisville. The doctor has been connected with this institution for many years. We do not know why this move was made, but while it may benefit the doctor certainly a loss will be felt by the college.

Obituary.

S. S. TILLMAN, M. D.

Departed this life on June the 19th, 1872, in the town of Newburgh, Ind., only son of Dr. J. R. and L. Tillman.

“Dr. Sylvester Tillman was a remarkable young man. Old and young not only respected but loved him; there was something about his manner so peculiarly winning,

that the high and the low felt in him I have a friend. And during his protracted illness, all classes of society watched with equal interest the progress of disease, and experienced like sorrow over the evidence of premature death. In his sick room there was ever present faithful watchers. As one of his medical attendants remarked, "Consumption has selected him, a shining mark," and on the 19th of June, 1872, he fell asleep in Jesus.

"As a physician, he had few if any superiors of his age; a member of the M. E. church for a number of years; a young man of prayer. He said on his dying bed, "I have been too wild, yet I never gave a dose of medicine without asking God to bless it, and make it efficient for the end for which it was designed." His intellect remained clear to the last, and the strong affection for his parents only increased as he neared the cold river of death. He was useful here, but the Lord has called him into a wider field of usefulness in heaven. But in this community where he lived from his boyhood to his death, these poor, feeble word pictures, only appear to mar the more beautiful picture of his frank and honest and noble life."—*Extract from Funeral Sermon.*

ROBERT C. CALHOUN, M. D.

Several members of the Vigo County Medical Society and others of the profession of Terre Haute assembled at Dr. Read's office, on Monday evening, July 29th, for the purpose of paying respect to the memory of Dr. Robert C. Calhoun, who died suddenly in this city of congestion of the stomach and bowels, in the 49th year of his age, on the morning of the 27th inst.

On motion of Dr. Long, Dr. Read was called to preside and Dr. Young was made Secretary.

On motion of Dr. Young, the following gentlemen

were appointed to draft resolutions: Drs. Young, Long, Gertsmeier, Purcell, Radcliff and Stone. Dr. Purcell, for personal reasons, asked to be relieved from serving on the committee, and took occasion to express his appreciation of the remarks of the Chairman. Dr. Thompson was appointed to fill the vacancy.

The committee retired, and on returning submitted the following preamble and resolutions, which were adopted:

WHEREAS, It has pleased an Allwise Providence to take from us our esteemed co-laborer Dr. Robert C. Calhoun, in the fullness of health, and in the midst of his usefulness; and

WHEREAS, It becomes our solemn duty to give expression to the feeling in which we hold our esteemed brother, be it therefore

Resolved, That in his death the profession in this locality has lost one of its useful and worthy members, whose example for industry, courtesy and practical ability entitled him to our admiration and personal respect.

Resolved, That we hereby tender to the wife and family of the deceased our heartfelt sympathy, and commend them to Him, who is the friend of the widow and fatherless, in this, their sad and sudden bereavement.

Resolved, That the proceedings of this meeting be published in the city papers, and in the *Indiana Journal of Medicine*, and that a copy be sent to the wife of the deceased.

The object of the meeting being completed, on motion it adjourned.

DR. S. J. YOUNG, Secretary.

INDIANA JOURNAL OF MEDICINE.

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Original Communications.

CARDIAC NEURALGIA.

Read before the Brainard Medical Society, June 17.

BY W. H. BELL, M. D., LOGANSPORT, IND.

The untiring labors of a numerous band of Neuro Pathologists have of late years thrown much light upon the study of the different neuroses, connected with that great centre of the circulatory system, the heart. At one time every highly irritable and painful condition of that organ, not immediately proceeding from some distant source of irritation, and as a consequence reflex, or on the other hand not the result of an inflammatory process, was named *Angina Pectoris*,—this was objectionable for this reason, that it assembled under one heading, of grave import, several nerve lesions themselves not necessarily fatal to life. But now the great advancement in the physiology and pathology of the nervous system, has enabled us to sub-divide and arrange in proper order, the nosological classifications relating to it; it is needless to state that this improvement gave much prominence to a small group of cardiac nerve affections that were previously but imperfectly under-

stood. Every medical man occasionally meets, in the course of his practice, with certain painful neuroses of the heart, that he is loth to arrange under the title of *angina pectoris*, both on account of the general clinical history that they manifest, and the almost invariable absence of organic tissue change in the organ affected. That *angina pectoris* is a neuroses there can now be no dispute, yet it is so frequently accompanied with calcareous or fatty degeneration of the cardiac walls, or with the deposit of *atheroma* lining its cavities, that although the neurosis and the organic change can not be traced as cause and effect, still their frequent association in the same subject can not but give rise to the belief that there may yet be some obscure connection between them. I shall dismiss *angina pectoris* from further notice in this paper, because, as I have just said, that notwithstanding its display of many purely neuralgic features, still when histological elements of the heart's tissue have been subjected to a close microscopical examination, some error in the nutrition of the part has been detected, an error characterized by fatty degeneration of each individual protoplasm, entering into the formation of each fibre, or by calcareous degeneration there.

Such minute change in cell structure is not met with in those varieties of heart pain, that I now designate as neuralgia, and which will for a short time occupy our attention. These pains are attended by two opposite states of the heart, the one consisting in a relaxed condition of its walls, and the other in a tolerably firm contraction. The period over which either of these abnormal states may last is variable, and in proportion as each becomes excessive does the disease become of grave import. Clinical observation shows that the affection is met with in various degrees of intensity, from simple cardiac irritability with pain, to that tumultuous departure from its ordinary healthy rhythm, so suggestive to the sufferer of impending dissolution, and once met

with to be always remembered by the medical attendant. The different grades of the disease all have pretty much the same general clinical history. It is an affection of later life, when bodily nutrition is less perfectly maintained, and when degenerative changes are more frequently met with in the economy—indeed a true neuralgia is almost unknown in early childhood.

A much greater proportion of males than females are attacked, and these as a general rule clearly manifest a predisposition, either hereditary or acquired. It is among the better orders of society, especially among the professions, where the nervous system is most taxed by anxiety, cares and over work, that the most marked cases occur—and lastly some primary disease, as for instance, diarrhoea, dysentery or fever, generally precedes the heart affection, acting as its direct excitant, by the prostration produced. It may be stated with certainty, that every depressing cause operating upon the economy does not end in the production of cardiac neuralgia; that this should be the result there must be, as already stated, a primary predisposition which has perhaps already manifested itself in an attack of neuralgia elsewhere; it may have been tri-facial or occipital, or tracheal, or intercostal, or in some other neuroses long ago developed in the patient himself or his ancestors. The proper elucidation of these points is of much importance, and should always receive due attention in directing an examination. The first symptoms of the cardiac affection will most often supervene suddenly upon some very trifling exercise or excitement; it will manifest itself in pain over the region of the heart, deep down underneath the ribs, or the pain may be felt at the lower part of the sternum, from whence it is sometimes reflected into the shoulders and down both arms, usually the left—the pain is of a darting nature and intermits, being at times exceedingly severe, and then lulls for a season. There is palpitation, and sometimes a peculiar

sense of contraction around the heart, as if it were grasped in both hands and tightly squeezed.

These two symptoms, viz: the pain and palpitation, display themselves in varying degrees of intensity, being always worse as the neuralgic habit becomes more deeply stamped upon the individual. All the more severe paroxysms of palpitation are accompanied by vertigo, and when the mental condition frequently occurs, there will also be defective memory, especially as relating to abstract ideas. Another symptom is oppressive respiration, the cause of which we can readily understand when we consider how imperfectly the heart for the time is contracting upon its contents, the proper performance of which function is so essentially necessary to the onward flow of the blood current; there is as a consequence great lassitude and indisposition for muscular movements; the surface is pale and cold, and sometimes bathed in a clammy sweat; after a time all the above symptoms disappear and the patient resumes his duties as if nothing had occurred, to be again however attacked upon some very slight provocation. This rapid return to an apparently healthy state is a striking characteristic of the neuralgic paroxysm, it matters not in what part of the economy it may display itself.

As regards the pain felt during these attacks, it may be stated that as a general rule it is near the apex of the heart, or at least over the lower part of the precordia, and is sometimes accompanied by hyperæsthesia over the whole left side of the thorax—this pain as already stated darts down into the arms from the axillæ, especially into the left arm, and lately I have grown to look upon this sign as almost pathogomonic of cardiac neuralgia. Usually after each attack of palpitation there is considerable headache, transitory in its character, attended with flushed face, injected eyes, and considerable increase of facial temperature. The pulse during the neuralgic attack, is often quite rapid, varying from one

hundred to one hundred and fifty per minute, with a peculiar jerk. I have also noticed that there was in many cases a considerable variance in the rapidity of the pulse, and that the standing posture increased this condition; intermission in the beat is also a common phenomenon.

When the ear is placed over the heart it will be noticed that the first sound is both short and feeble, is not sufficient in volume, and is valvular in tone, in short is very much like the second sound only more weakened; the second sound of the heart is exceedingly clear and distinct; both sounds may be heard often over the left lung, and sometimes even the right, and is so loud as often to obscure the breath sounds.

Any organic valvular lesions that may exist will invariably be accompanied by murmurs, and these will vary in tone and intensity with the extent of the lesions; there may however be murmurs present not due to organic lesion, these are due to anæmia and are thus distinguished; their pitch is not intense, the sound can not be located in one spot but is rather diffuse, heard most plainly however at the base of the heart, rather than the apex as is the case in organic valvular lesions, these on the systolic murmurs. Of the diastolic murmurs the same may be said, they are however always increased by holding the breath. An anæmic murmur can never be heard at the back, especially at the lower angle of the scapula, where an organic murmur may be heard with so much plainness. In addition to the heart sounds described, if venous and arterial murmurs be discovered, there will then be but little doubt but that the heart sound is inorganic.

The above symptoms are descriptive of the more mild forms of cardiac neuralgia, an affection that is met with much oftener than is generally supposed, and which has been frequently mistaken for intercostal neuralgia, the distinguishing points between them being that in the

latter affection tender spots are found over the spinous processes of the cervical vertebræ as well as the angles of the corresponding ribs, where the intercostal nerves become superficial, and the marked absence of cardiac signs. Of late I never hear a confession of heart pain with irritability of the organ, accompanied with dizziness and inertia, especially when the preceeding history is one of diarrhœa or of exhaustive fever, but that I suspect and look for the disease now under consideration, existing it may be in a very mild form, but, nevertheless distinct in its nature, and requiring its own appropriate treatment.

But the neuralgic paroxysm is sometimes met with in a much more aggravated form, and then it assumes features somewhat peculiar and which merit a separate consideration. These features while they differ in degree from those described, may themselves be separated into two classes, dependant directly upon two distinct pathological conditions of the cardiac walls, the one characterized by paralytic relaxation, and the other by contraction of the muscular fibres. In the first named of these pathological states of the heart there are marked symptoms of collapse, the face is cold and pale, and the general surface is covered with a clammy perspiration, the eyes are hollow and sunken, and the respiration short, jerking and labored. The patient has an overwhelming sense of impending death.

This sense of impending dissolution is an almost constant attendant upon muscular paralysis and its presence is thus expressive: The impulse of the heart against the thoracic walls is imperceptible, indeed in extreme cases the stethoscope can with difficulty detect the most feeble contraction; the radial pulse may in the presence of these conditions be almost absent; the pain in the præ-cordeal region is agonizing, and as in the more mild forms of the disease, it darts into the axilla and down the left arm, or perhaps both arms; there is also

considerable numbness in the hands, with quite a fall of temperature; diziness; sounds in the ears; nausea and temporary loss of mental function are also accompanying symptoms. In some cases a peculiar hyperesthetic state of the general cutaneous surface has also been observed. There can be but little doubt that the relaxed state of the heart walls is due to the irritation of the cardiac plexuses of the sympathetic, whereby the coronary arteries become contracted and a due supply of arterial blood is thus cut off from the heart, nutrition being thus lessened, and as a sequence functional power is in a measure lost. Some time ago a case, analgous in its manifestations to the conditions described above, came under my care, caused, there can be but little doubt, by the flatulent distention of the stomach, and in all probability would have ended fatally but for the prompt administration of a mustard emetic, a warm bath, and small but frequent doses of sulphuric ether. The existence of functional disorder of the heart, in connection with disordered condition of the stomach, is a thing frequently met with. All of us in our own practice can remember examples, and I think when a tendency to neuralgia exists, a disordered stomach may readily produce temporary cardiac paralysis.

When there is clonic spasm of the muscular fibres composing the heart walls, there is then a material difference in the symptoms observed, the viscus bounds and beats tumultuously against the thoracic walls; the pain and burning over the præcordia is unbearable; the pulse at the wrist is heard and bounding; indeed this sensation is always associated with some amount of muscular contraction—the patient will describe it as if grasped firmly in the two hands and tightly squeezed—the face is flushed; the eyes injected; and the temperature over the general cutaneous surface is increased; respiration is somewhat increased, though not in proportion to the increase in the frequency and volume of

the pulse. Pain darting down into the left arm from the heart and axilla is characteristic in this as well as in the other form of the acute cardiac paroxysm. The observer may be led to consider the two conditions just described as essentially different diseases, but excepting the fact that muscular relaxation exists in the one state, and clonic spasm in the other, they differ pathologically but little, and may both occur in succession in the same individual. Such is marked by the patient in a case now under my care, in whom the affection has lasted for two months, and in whom the different paroxysms occur on alternate days. The duration of cardiac neuralgia varies greatly; it may be that the disease will terminate after two or three paroxysms, provided the anæmia of the nerve centres causing the affection disappear and does not return, or the heart affection may terminate in speedy death, or may terminate life by cerebral softening or apoplexy, after a lengthened period of time, which is sometimes the case.

Diagnosis.—The disorders that are most likely to be mistaken for cardiac neuralgia, are myalgia implicating the pectoral or intercostal muscles, intercostal neuralgia and the initiatory stage of acute pleuritis, in its circumscribed form. The character of the myalgic pain differs very materially from neuralgia, as any one who has had severe lumbago or pleurodynia will attest. The myalgic pain is always worse in a part of a muscle that has been overworked and badly nourished, and is most severe near its tendinous insertion. It may occur in a person who has not the slightest neurotic tendency; the tenderness is increased on movement and on pressure, and when the muscle is fully distended the pain is momentarily relieved—these joints will at any time distinguish myalgia. Intercostal neuralgia is always accompanied by tenderspots over the spinous processes of the vertebræ, corresponding to the nerves implicated, and also by sensitive patches of integument at the angles of the ribs

where the nerves become more superficial. The distinguishing features of circumscribed pleuritis, will clearly portray themselves after a careful examination of the case. I may merely state a point or two touching them, viz: the early history of some cause giving rise to the inflammation of the pleura, the existence of fever, and the state of the circulation, on the whole the diagnosis as regards pleuritis will be easily made out. Dr. Anstie gives several affirmative signs as pointing out cardiac neuralgia. Though I have alluded to them before, I can not do better than present them as given by himself. They are "1st, age over forty; 2d. male sex; 3d. nervous temperament (personal and family); 4th. existence of arterial degeneration; 5th. existence of valvular disease of the heart; 6th. extension of pain to one or both arms; 7th. vivid sense of approaching dissolution."

Pathology and Cause.—It seems a fact now clearly established, that in the milder forms of cardiac neuralgia, there is no morbid condition of the heart invariably existing that can unmistakably be identified with the neuralgic affection. Fortunately our opportunities for post mortem examinations are limited, as most of the patients regain their health, and though the same fact as regards mortality does not hold good in the more severe forms of angina, still even in these cases, the fixing of a pathological condition of the heart, in connection with its neuralgia, is a matter of great uncertainty. Notwithstanding that in the more severe cases of angina, fatty degenerations of the heart, or ossification of the coronary arteries have been met with, and undoubtedly have had their share in hastening a fatal termination, still these very conditions are met with where no neuralgic tendencies has at any time existed, and on the other hand in some of the most severe and rapidly fatal instances of cardiac neuralgia, the heart texture has shown not the slightest departure from its normal condition.

Dr. Walshe in his work on diseases of the heart and great vessels, tersely said in connection with this subject all that can be said now, he writes: "First, there are few if any structural diseases either of the heart, its orifices and its nutrient arteries, or of the aorta, found recorded in the narratives of the post mortem examinations of different victims of angina. Secondly, there is no considerable disease of these structures and parts, which has not in various individuals reached the highest point of development, with anginal paroxysms even of the slight kind having occurred during life; to this proposition, extensive calcification of the coronary arteries perhaps furnishes a solitary exception. Thirdly, the organic changes most frequently met with, have been fatty atrophy and flabby dilatations of the heart, obstructive diseases of the coronary arteries by atheroma and calcification, and calcification of the orifices and arch of the aorta. Fourthly, the rarest have been hypertrophy, and hypertrophy with dilatation. In truth it may be doubted whether these conditions in their genuine form, without any combination of fatty atrophy have ever been the sole morbid states present." The causes of cardiac neuralgia may be divided into predisposing and exciting. Amongst the predisposing causes, unquestionably hereditary transmission holds the first place; the above fact was established in fully three fourths of the cases, forming the subject of inquiry in this respect. A fact that sometimes occurs in the history of hereditary transmission, is that occasionally the children of strongly neurotic parents escape the tendency, which reappears in full force in the grand children. This is a fact that applies as strongly to other neuroses as well as to neuralgia of the heart, and should always be borne in mind in forming a diagnoses. Sex holds the second place in the order of frequency as a predisposing cause, and Sir John Forbes actually made out that among his own cases eighty were males, out of a total of eighty-eight

who had suffered from the disease in question. This is I think an over estimate, and is not sustained by the observations of other writers on the subject; still the disease occurs much the most frequently amongst the male sex—all observers agree upon this. This may in a measure be accounted for by the fact that men have to endure a much larger amount of mental and physical labor than usually falls to the lot of women, and consequently with them the chances are increased for the poorly nourished heart to take on those pathological conditions necessary for the onset of neuralgic paroxysm. As before mentioned the disease is most frequently met with in men holding places in the better order of society, who are continually influenced by those cares and anxieties attendant upon the arduous and rapid accumulation of a fortune, so that position in society may be also mentioned as an exciting cause. In my own practice I have a vivid recollection of an instance of cardiac irritability occasioned under the above circumstances. It was that of a merchant, whose disease was brought on by an over application to work and by anxiety. So rapidly did the functional disease of the heart increase, that in a few weeks he was utterly unfit for the lightest work, and he only regained his health by complete separation from his business and many months' travel abroad.

A tendency for the disease having thus been created by any of the above predisposing causes, it now remains to mention those influences that are directly provocative of the attack, and hence are well named exciting causes. They may be divided into two classes, those that act directly upon the spinal or cerebral centres through the medium of the blood, and secondly, those influences that are an expression of any variety of peripheral irritation, acting through the apparent nevis upon the same nerve centres.

Amongst the causes acting directly through the blood may be mentioned the following: The malarial poison,

the syphilitic viris, lead, the rheumatic taint; the poison of tobacco, and one or two others of less importance. The peripheral causes are cold, which causes an anæmic condition of the nerve centres by its depressing influence; any continued irritation to the extremities of the sentient nerves; reflex irritation from any of peripheral nerves, as for example, the fœtus in utero, an instance of which happened sometime ago in my own practice; excessive sexual intercourse; sudden shock from any of the depressing passions; the injury of a nerve, and sometimes continued pressure upon it, as for instance the pressure caused by a tumor or the narrowing of the caliber of a foramen, which gives exit to a nerve cord; the reflex influence caused by a disordered and distended stomach or a carious tooth. Any one of these causes will, where the predisposition exists, give rise to the neuralgic disorder of the heart through its depressing influence on the nerve centres, thereby producing anæmia of the nerve centres, and as a consequence disordered and imperfect nerve function; this is in a measure brought about through the sympathetic, acted upon as it is by the spinal nerves. I might mention several instances to illustrate these remarks, but space and time will not permit; I might mention also a number of other peripheral causes, but those alluded to will answer our purpose at this time.

Prognosis.—The more severe forms of cardiac neuralgia, whether attended with relaxation or contraction of the heart walls, are always of grave import, and the tendency to a fatal termination is always increased by the histological degenerative changes in the heart's texture, so that whenever dilatation, with or without hypertrophy, is detected, or the stethoscope gives warning of the existence of serious valvular lesion in a subject laboring under neuralgia of the heart, a most guarded prognosis should be given. The fact as to the variety of pathological change has but little bearing on the final

issue of the disease, it matters not whether these changes be fatty or calcareous degeneration of the walls, or any other of the many lesions that are so frequently met with in old standing cases of the disease described. It is in persons with hearts as yet in a sound condition, or in whom cell change has as yet made little progress, that a more assuring prognosis may be given,—indeed in whom there is a good prospect of removing the disease by a well ordered course of medicine and hygiene. In the severe forms of the affection death may occur at the first, second, or third attacks, or it may be postponed some little time; in the less severe a ripe old age has, in rare instances, been known, not incompatible with its existence. The paroxysms in the latter variety may occur weekly or monthly, or two or three years have been known to intervene between individual attacks. It is in the purely neurotic forms of the disease that the interval between the attacks are longer, and the opposite of this holds when degeneration exists.

[TO BE CONTINUED.]

REPORT OF AN EPIDEMIC OF DIPHTHERIA.

Read before and ordered printed by the Hendricks County Medical Society, in the Indiana Journal of Medicine.

BY JOSEPH A. EASTMAN, M. D., OF BROWNSBURG, IND.

Concluded.

Medical authority is divided as to the communicability of diphtheria. Trousseau and Peters experimented extensively and could not communicate the disease, and yet there are numerous and striking examples of the disease being conveyed from one person to another by the introduction into the mouth or nostrils of some of the putrid exhalation. Dr. Flint says, "It is certainly proper that precaution be taken to avoid needless and excessive exposure." For my part I agree in full with

Dr Jacobi, and use his language in stating my convictions that the disease is contagious, "I know full well that the proof is not easy. Inoculation has proved either fruitless or improbable. The cases of surgeons related to have been directly affected by diphtheritic virus admit of other explanations. The vast majority of cases believed to be, and reported as, proofs of contagiousness are really better explained by local endemic influences." I do not mean that it is necessarily communicated to everybody coming in contact with a patient, yet I have observed that members of the family most engaged in waiting on the sick are much more apt to take the disease than those who seldom come near it; nor do I mean that no case of diphtheria could originate except by contagion, but feel more that it partakes of the nature of such epidemic diseases as typhoid fever, scarlatina or rubeola. The failure of experiments as to contagion in the last three diseases has established as little against contagion as in the disease in question. Diphtheria rarely occurs sporadically. The so called sporadic cases are often nothing but follicular pharyngitis. It is eminently an epidemic disease; it has a special cause, what that is remains still a much vexed question.

There is a discrepancy of opinion as to the microscopic appearance of the membrane. Vogel states that the membranes consist in greater part of granules and cells, solitary epithelial cells, and stria of fibrine. Dr. A. Jacobi states that *aideum albicans*, *leptathrax buccolis* and other microscopical fungi have been found in examination of the membrane, but thinks their presence accidental rather than essential. A large number of our authors stand "non committal" on the subject, while our German brethren place diphtheria and many other diseases as results of fungi. The fungus theory can be carried beyond reason. For example, Dr. Saulsbury, of Ohio, has carried the fungus theory so far that the different forms of ague seem to be due to the length of

time required for the fungus to mature after entering the system.

Dr. A. Classen, of Rostock, has advanced the finest piece of theory, (Virchow *Nachurs*, Feb., 71.) which, if true, would make our knowledge of the disease almost perfect. He considers that diphtheria is primarily a local disease, and that it depends on a fungus which penetrates the epithelial cells of the mucous membranes. The result of this penetration of the epithelial cells by the fungus is a greatly increased growth of epithelium, so that layer on layer of such cells are produced, and at the same time white and red blood corpuscles pass from the vessels and mix with the diseased part. He considers the exudation to consist chiefly of changed epithelial cells, and of blood and puss corpuscles. He has detected the fungus in the very substance of the epithelial cells; as it is extremely minute he supposes that it passed from the affected membrane into the blood vessels and there produce the constitutional symptoms which are thus secondary to the primary affection of the fauces. The presence of the fungus in the mucous membrane leads to irritation and inflammation, and the inflammation has the usual result, and as it is generally surer it is commonly followed by sloughing of these structures. The doctor has distinguished diphtheria from croup by the presence of this fungus.

I would take the disease to be one in which the morbid productions in the throat are the results of blood poisoning from uncertain causes, but chiefly from the inhalations of virus from the air; and certainly in these malignant epidemics it is from the onset attended with symptoms of debility; especially is this true in strumous conditions; therefore the general character of the disease indicates tonic and stimulant treatment. Dr. Baxton Hicks in commenting on some cases of diphtheria that occurred in the surgical wards of Guy's Hospital, says, "It matters not, in practice, whether we believe in

the living germ theory or floating poisons, but that *what* attacks the patient has a material existence, and is capable of being diffused, driven away or destroyed, seems to be completely proven.”* This assertion is worthy the high source from which it emanates, yet medical science of the nineteenth century has to acknowledge that as yet it has no known specific with which to diffuse, destroy or drive away the essential “*materies morbi*” of this disease. Almost all physicians experienced in the disease agree, that in severe attacks the most prized remedies are perfectly useless. As for myself, I never had much faith in remedies (whether general or local) in staying the progress of this disease in malignant cases, and after contending with the present epidemic I have still less. We see however, reports of cases continually where the recovery is ascribed to certain remedies. As to the local remedies, all physicians agree that we must do something for the throat whether or not we believe the disease to be local. Dr. Classen, of whose ingenious theory I have spoken, considers cauterization with nitrate of silver superficial and useless, I would add my belief that it is more than useless. He applies the sulphurous acid and thinks he has found this a reliable remedy. As general remedies he uses carbolic acid internally, with a view of destroying the fungus; during convalescence he uses quinine and iron. This treatment is based on the idea that the disease is primarily local, a point not yet settled.

I could occupy your valuable time for hours in giving treatment of this disease, the time would be more than lost. The disease is preeminently an adynamic one, prostration will set in, and complete exhaustion will sometimes destroy patients despite the most careful supporting treatment. Therefore I could have no other reason for mentioning venesection, mercury, emetics or

* Rankins Abstract, 71, from Guy's Hospital Reports, Vol. xvii.

large doses of the alkalies, as potassa or soda in various forms, but to condemn them in the strongest terms. The abundance of fibrin does not require liquifying, as the more hydræmia is increased the greater the proportion of fibrin.

I have but a few remedies and I believe them of known efficacy. The condition of the throat calls for remedies to retard the pathological change, and as an external one with this object in view, when the throat is hot and much swollen, a towel wet in cold water and applied to the throat, of all others seems to me rational, devoid of danger and useful, furthermore the patient will in a short time derive as much comfort from this as from any other means. It has the power of constringing the coats of the blood vessels, and thereby preventing the escape of the white corpuscles of the blood.* This last pathological step will in a few years, I believe, be placed beyond dispute, by its earnest advocates, Conhum, Virchow, Rokitansky, Bilroth, Jacoud, and other great minds in pathology. For the swollen and inflamed condition of the fauces, a solution of carbolic acid in alcohol, I believe to be *the* remedy. There are several points of merit not to be lost sight of when speaking of this new therapeutic agent, which has been lauded to the skies and announced as a panacea for all diseases as well as a "precious balm for the wound." The source of contagion is generally admitted to be from the putrid exhalations, and the source of laryngeal invasion is supposed by some to be the putrid inhalations, and contact with portions of exfoliated membrane. What could be

* Dr. Carun, of Peoria, in a series of able papers, calls (Phila. Med. and Surg. Reporter, also referred to American Practitioner, April, 1871,) attention to the happy results of this ice and ice water treatment of diphtheria, scarlatina, croup and quincy. His practice has extended over a period of twenty years, in which he has constantly used these remedies with most magical effect. He gives over one hundred cases of scarlatina without a fatal result.

more rational than to keep the parts smeared with this powerful antiseptic even if no further good was expected, for under its use the breath rapidly loses its extremely offensive character, which had previously rendered the patient loathsome and repulsive, even to those who by the ties of consanguinity were rendered near and dearer than life itself. I believe that as an internal remedy to the fauces to prevent pathological change in the parts we have none better. Dr. Roth, of Altenburg, has had a large experience in the use of this remedy. He seems to think it does not act altogether as a caustic, but that it seems to filter through the false membrane, under which as a rule a normal mucous membrane is formed. "It seems," he remarks, "to avert septic infection." He cautions us against letting any of the solution touch the tongue. He has in no case observed an extension of the disease, nor indeed, any secondary affection. The solution he uses is one part acid to five parts alcohol. I think this solution too strong, for children, by at least one half, that is as a rule. Dr. Hartz uses acid carbol., alcohol aa 3i, water 3ii, tr. iodine 3ss,* this he uses to the fauces, and in a diluted form as a gargle. The combination with iodine destroys the unpleasant odor of the acid and increases its antiseptic properties.

The appetite, in this disease, is lost, nutrition nearly destroyed, the pulse indicating, even at the very onset, a condition extremely favorable to destructive assimilation. The sympathetic nervous system, which presides over the nutrition and circulation of the body, is evidently in a weakened condition and much in need of quinine, which Hanfield Jones says, "is a precious tonic of the vaso-motor nerves," and upon this hypothesis, if no other, the beneficial influence of quinine in diphtheria receives its perfect *rationale*. Brown Sequard's experiments in galvanizing the sympathetic, but sub-

* Chicago Med. Record, Aug. 15, 1871.

stantiates the above relation of this nervous system with the influence of the *materia morbi* of disease and the secondary destruction of nutrition; furthermore quinine is not only a powerful but a *safe and precious febrifuge* by its tranquilizing influence. The temperature, pulse, and tongue all mark improvement under its influence, even in cases which essentially prove fatal. A child, two years of age, will bear grain doses every three hours, and only seem to rest and improve from increasing the dose half a grain more. Dr. Jacobi, of New York, gives double the dose I recommended. Our knowledge of the physiological and therapeutical action of this invaluable alkaloid has been recently much extended by the labors of Binz, Rankie, Kerner, Zuntz and others. Binz finds that quinine has the power of arresting the processes of putrification and fermentation in a high degree, and that it is an active poison for all low organisms, animal or vegetable; further, pus being but a collection of white blood globules which have passed through the walls of the vessels, quinine has the power of retarding the motion of the white corpuscles and preventing their exit from the vessels; moreover it destroys the organizing power of certain substances, and as the red corpuscles have this power, quinine in the blood probably diminishes oxidation of tissue and lessens the production of heat. These experiments are in accordance with clinical observation and have an important bearing in practice. The putrid blebs that forms as an areolæ around the least pin scratch on a child sick with diphtheria, indicates to me the need of a remedy that will do what these experiments prove that quinine will. The very best hygienic influences should surround the patient; frequent bathing with soap and water, followed by soda in water, are of decided benefit to the emunctories of the skin. I would give ice, ice water, iced lemonade and lemon juice freely, when I can I dissolve the quinine in lemon juice, after the plan of Dr. Cham-

bers in dyspepsia; we can not get some children to take this combination. A most generous diet of milk, strong beef tea, eggs, eggnog, wine, wine whey, brandy, and brandy punch should be used in these malignant cases from the very first. As to the use of iron and chlorate of potash, I would not expect much benefit from any preparation unless it be the tincture of the chloride in a saturated solution of chlorate of potash, and I can not say that I have seen this benefit any of these malignant cases. I would not bother children, under three years of age, with iron in any form; I would save their stomachs for nourishment. In older children and in adults, if we could get them to take such doses as Prof. Mott uses in erysipiles, (drachm doses,) we might expect benefit; children can not take such doses, adults do not like to. The bowels should be kept in as good a condition as possible, that all the excretions may assist in eliminating the poison. When the larynx is involved, everything that will sustain the powers of life should be freely used. In Dr. Classen's cases a number of them recovered after it was considered necessary to (the parents refusing) have tracheotomy performed. The use of inhalations of lime water would be of advantage in such cases, giving the patient the remote change of coughing out the membranes. With regard to tracheotomy, I must think it (even in these malignant cases) is often justifiable. Dr. Flint, in his practice, censures the physician who would not give the patient the meagre chance this operation affords. My first case of tracheotomy in diptheria was not like the of the eminent surgeon Nelaton, as his first case was a brilliant success, yet I believe I would not like him operate twenty-three times unnecessarily thereafter without a single recovery. Trousseau says, the operation "has a chance of success, when the local lesion (the croup) constitutes the principal danger of the patient." My case would have been very favorable for the operation had the con-

sent of the parents been gained sooner. This restriction given by Trousseau is very important, for says he, "If the diphtheritic infection has profoundly affected the economy, if the skin, the nasal passage are attacked by the special inflammation, if the frequency of the pulse, the delirium and prostration indicate a profound intoxication, if, in a word, you have a case of malignant diphtheria, where the peril is rather in the general condition than in the local lesion of the larynx or trachea, the operation should not be attempted." Dr. A. Jacobi says, "The only indication for the operation rests in the local obstruction." I believe the less the amount of general as compared with the local danger should at least weigh on our mind in deciding as to the propriety of an operation, yet I fully concur in the sentiment of Barthez, "If, children the subjects of bad croup, having reached the stage of confirmed asphyxia, and having no longer anything to expect from medicines, offer to the surgeon the chance of one recovery in ten, in twenty or even less, I for one have not the heart to refuse them." With the light of the past to guide us, we ought, any of us, to have as good success as Nelaton, who doubtless operated after the usual French mode, regardless of the advice of his countryman Trousseau, and of the most eminent surgeons of other nations, that the child should be dying from apnæ and not from asthenia to justify the cutting of its throat.

BIOGRAPHICAL—THE LATE DR. LUTHER JEWITT, LAFAYETTE, IND.

BY JAMES W. WILSON, M. D.

Dr. Luther Jewett was born at St. Johnsbury, Caledonia county, in the State of Vermont, November 5, 1805.

At an early age, like many other energetic young men, he saw his hopes of future success in the west, and

came as far as the State of Ohio. His pecuniary resources were limited, and he taught school awhile to procure means with which to attend the medical lectures. His efforts were finally successful, and his medical course was completed in Cincinnati. He there had the great advantage of hearing the luminous expositions of Drake and Mussy; for both of these men he ever afterwards expressed the highest admiration, and this was especially to be remarked in relation to Dr. Drake, whose powerful grasp of intellect he fully appreciated.

Dr. Jewitt thus prepared for the practice of medicine, formed a partnership with a physician in Trenton, Ohio. The partner was old, and the chief portion of the business was soon attended to acceptably by the younger and more active man. However, notwithstanding this successful beginning, he saw that he was surrounded by physicians in near proximity of established reputation and deserved popularity, and that the circle of his labors must of necessity be narrow—he had not room enough; and so determined to seek a wider sphere of action further west. Collecting together his earnings he came to Logansport, from there he wrote to Dr. Jennings, of Lafayette, with whom he had a slight acquaintance, inquiring what would be his prospects if he should come to Lafayette; the reply was encouraging, and he left Logansport after but a few weeks residence there.

Dr. Jewitt came to the embryo city of Lafayette in the summer of 1835, with about four hundred dollars in money. At that time, the writer of this sketch formed with him a friendly acquaintance, which continued uninterrupted the remainder of his life. He opened an office and at once entered on the business of his profession. His success was decisive from the beginning; his practice became large and lucrative, and he soon attained a leading position which he continued to hold without interruption, almost without variation for many years, and which perhaps he might have held still longer if he

had desired to do so. But the possession of an ample fortune made it unnecessary for him to continue the drudgery of a most laborious profession. He had no family to stimulate his flagging energies to renewed effort. He had married a lady in Vermont in 1841, but she died a few weeks after her arrival in Lafayette; he never married again. During the last few years of his life, as far as was in his power, he withdrew from practice. He found employment and profit in overseeing his property, a large portion of which was in land. His farming operations were conducted judiciously.

If it should be supposed that the immediate and great success of Dr. Jewitt was owing to the low standard in the medical profession of Lafayette, or a want of ability or popularity in its members, this would be a grave mistake. Dr. E. Deming was already there, Dr. O. L. Clark had been there for some years, and these two men, of decided intellectual endowments, were flanked by a number of others highly meritorious, and perhaps only inferior to them in celebrity. Dr. Jewitt deserved success, he was an able physician; his diagnosis and prognosis were good; he knew the curative power of medicine, and he knew the value of time as a restorative agent. He was prompt and decided when the case required or permitted active treatment, and understood well the art of good nursing when it did not. He had the faculty, in an eminent degree, of securing and retaining the confidence of his patients and their relatives. He was cheerful and hopeful in his intercourse with them, and inspired them with the same cheerfulness and the same hopes. He led them to feel that he was interested in their recovery, that while in his, they were in good hands, where they were quite willing to remain.

Dr. Jewitt's education was limited; he had learned a little latin and there his classical learning ended; he was not a great reader, he was a great thinker. He had a philosophical mind, he wanted to know the reason of

things; he wanted to measure actions by great principles. He loved to work out in this way problems in morals and politics as well as medicine. It is not surprising if this analytical mind, always asking for a reason, was sometimes involved in a lybyrinth of perplexity. On such occasions he has used expressions not quite orthodox in relation to medicine as well as other subjects. These moods were of but short duration, and had no effect on his conduct or his resolution. Indeed such expressions could hardly be taken seriously; often they were the result of momentary uncertainty. Not rarely doubts were suggested to give his friends an opportunity to solve them, or that he himself might show their falacy.

He had a large fund of good, practical common sense, which could not fail at the proper time to assert its power. This was a marked feature in his character, and to a great extent supplanted the deficiencies of a mind but partially cultivated. He highly appreciated the same quality in other men.

It has been claimed for some men that they were born doctors—that they were made doctors by nature. Despising all such pretensions of unlearned ignorance, it may yet be admitted that some men, by a peculiar adaptation of mind and temperament, are more especially fitted for that profession. It is doubtful whether Dr. Jewitt was one of these; with him the practice of medicine appears to have been a means for an end, and that end attained he no longer cares to continue the practice. With his energy, strong mind, and practical good sense, he would probably have been successful in other pursuits.

His profession did not contract his mind. His range of thought took in other subjects as well as medicine. Whatever his opinions were, he was free to express them, but not with acrimony. He was a strong politician, but never a partizan. He was an abolitionist when to be an abolitionist was anything but popular.

He was deficient in language; he could not easily find words to express his meaning. His mind teemed with ideas struggling to find utterance. When the knife failed to cut he lacerated with the handle.

He was a financier; he well understood Franklin's maxim, that "Money begets money." Yet the basis of his fortune was laid, and a goodly portion of the superstructure reared with the profits of his profession.

He was benevolent to a degree, yet his benevolence was discriminating. He often extended needed assistance to weak congregations and needy pastors.

He had a few oddities, amounting almost to eccentricity, but in no way unpleasing, an allusion to which is necessary to complete the picture.

This is not a delineation of a common mind. Dr. Jewitt was not a common man. Many physicians, as well as men in other pursuits, spend a life of reasonable length and make no mark, and die and leave no void. Dr. Jewitt made his mark, and there are multitudes who will feel his place vacant while memory lasts, and until the place that knows them now shall know them no more forever. Dr. Jewitt died May 13, 1872, aged 66 years and some months.

At a meeting of the physicians of Lafayette, in addition to the usual expressions of respect for the deceased, it was further

Resolved, That Dr. Wilson be requested to write a biography of Dr. Jewitt, and that it be published in the papers of the city and the Medical Journals circulated in this vicinity.

In accordance with this request the above sketch has been prepared.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, INDIANAPOLIS, IND.

CASES IN PRACTICE—In diseases of the eye and ear, the folly of the popular prejudice against applying for medical assistance in proper season, is too frequently seen. Kind-hearted but mistaken persons are often over-zealous in urging some favorite “eye-water,” or “ear-drops,” upon the unfortunate possessor of an afflicted eye or ear, and the result sometimes, is the destruction of sight or hearing. The vilest and most inappropriate remedies or compounds are recommended, which are, “never known to fail,” and which cured this or that person after the doctors had abandoned all hope and attention.

Few of us there are who have not seen patients after they have been advised to wash their eyes in their own urine; but never, until recently, have I seen a case where urine was employed in the ear. A man applied for relief from a violent inflammation of the external meatus, with the history of the complaint, briefly, as follows: He was troubled with what was probably a furuncle in the meatus, and an elderly female neighbor had poured into his ear “some of her own *water*,” which proving too hot, or “too strong for his constitution,” as she thought, had excited a violent otitis externa with subsequent perforation of the membrana tympani. “’T was strange, ’t was passing strange,” for her urine had never been known to act in that way before. There was, in this case, no inspissated cerumen.

Gonorrhœal virus has more than once been conveyed to the conjunctiva by the patient following the advice of ignorant friends, and the eye destroyed within a short space of time.

Many persons have lost their sight or hearing, owing to an almost irrepressible desire of friends to “doctor the system for scrofula, or “bad blood,” or “worms,” or

some imaginary constitutional disease, supposed to be the cause of the ocular or aural troubles, when they are of local origin, and may be causing the general symptoms.

However much people may dread to have the physician apply his washes or lotions to these organs, their terror is four-fold when any operative procedure is called for, and many patients suffer for years, rather than submit to the slightest surgical interference.

A man from Greenfield, Indiana, came to my office, during the summer "to see what was the matter with his eye, but not to have me do anything for it," as he had been told by his friends "that if a doctor saw it he would want to stick a lance into it." About a week previous to that time, while engaged in working in a field, he experienced sudden pain in one eye, as though a clod of dirt had struck him. After rubbing his eye the pain materially subsided, but had never been entirely absent. The eyelids were swollen, the conjunctiva inflamed, and discharging mucus and pus, the cornea rough, ulcerated and blurred, eye very sensitive to light, and vision so indistinct as to preclude distinguishing any object.

Upon everting the upper lid after doubly assuring the man that no "lance" would be used, I found ensconced in the retrotarsal fold, the wing case of an ordinary black beetle. This was removed, a solution of atropia directed to be dropped into the eye occasionally, and a compress bandage was applied; the bandage to be removed twice daily, the eye thoroughly cleansed, and fresh castor-oil poured upon the eye-ball. Under this treatment the patient soon recovered his sight, which undoubtedly would have been lost if eversion of the lid had not been practiced, and the foreign body removed.

Several weeks ago a man came from Harrison, Ohio, with supposed granular ophthalmia, for treatment. His physician had looked at the eye (the right one alone

being affected), and the patient being afraid to trust him, a thorough examination was not allowed.

By means of lateral illumination, a small scale of iron, or some foreign substance, was found imbedded in the cornea near the center. This iron atom had probably entered the eye, unnoticed by the patient, while engaged in his usual avocation—that of a machinist. All the ordinary symptoms, caused by the presence of a foreign body in the cornea, were present in this case, and the particles would very likely have been discovered by his physician, if the patient had possessed more confidence in the doctor's ability to treat ocular affections. After the removal of the offending body all symptoms of irritation subsided.

Occasionally we meet with timid individuals who choose to suffer for several days with a furuncle in the external meatus, in preference to having it opened; and aversion to the knife treatment, in these cases, is sometimes not only owing to dread of pain, but also to fear of irreparable instrumental injury.

A child, aet. 4, had been suffering for a week with a violent pain in both ears. A physician was called, who, without examining the ears in any way, prescribed the use of poultices, but their employment was attended with an aggravation of the symptoms. Drops of laudanum and oil were substituted for poultices, with no abatement of pain. The patient's parents were then gravely informed that the disease depended upon strumous taint of the blood, and "burdock tea" was given to correct it. The trouble really depended upon the presence of two grains of corn in one ear, and one grain in the other. These grains of corn were placed in the ears by one of the patient's playmates, and their presence had either been forgotten, or fear prevented confession. Had the physician looked into the ears he might have been spared a considerable degree of humiliation.

Foreign bodies in the ear are usually the result of accident, but we find, especially in young children, that they are placed within the meatus to modify the irritation or itching caused by inflammation of the meatus. In fact some children seem to possess an irresistible impulse or mania for placing everything of proper size in their ears. A little inmate of the Orphan's Home, in this city, is afflicted with disease of the ears, and almost every small object that can be placed in the meatus is sure to find its way there. Thus, in the space of one week, at various times, were removed three small pieces of straw, two pieces of coal, an apple seed, a piece of gravel and a small brown beetle.

The moral we wish to deduce from a narrative of these cases, which are truths and not fables, is this: That physicians should pay proper attention to the diseases of the eye and ear, and thereby cultivate the confidence of the people in their ability to treat them in an intelligent manner.

Gleanings from Foreign Journals.

BY GUIDO BELL, M. D., INDIANAPOLIS.

Spiegelberg and Gscheidlen made very exact experiments with dogs in regard to the quantity of blood during pregnancy, and found the quantity of blood is increased after the middle of pregnancy. The quantity of haemo globin differs according to the nourishment, the increase of water in the blood, if occurring, does not amount to much.—*Archiv. f. Gynaek.*

Olshausen gives some critical remarks on rupture of the uterus during confinement and says, the active method is the best in complete and incomplete rupture.—*Ibid.*

On the twisted suture, Dr. Burow uses the English needles, somewhat glown out and formed like a lancet, then flock silk, at first thinly twisted, twenty-fours after some more and covered with collodium. The needles are drawn out, the stitches have to be half inch from the edge of the wound. The main thing for first union is, that *the wound is exposed to the air*. Salves and charpie are bad. On the knot-suture he says, cat-gut is the best material according to many experiments made on his own skin. B. uses Singer's machine needle, that is formed to a lancet and has a handle, the thread is better put into the eye after the stitch, it can be retained there for weeks without suppuration.—*Berlin. Klin. Wochen.*

Since hypodermic injections of morphia are used in meloncholy, some successful cases are reported by Mendel, where opium treatment had failed. Many authors are as opposed to the morphine treatment as they have been to opium. They say chloral is a better and safer hypnotic. But morphia seems to work as a specific in certain cases of hyperæmia and anæmia of the brain. Its curative action should not be doubted, although about 80 per cent. of all successful cases heal spontaneously under proper care. Injections of about 0.03 have to be made twice a day. M. gives some anatomical facts to proove the probability of his opinion, and says the good effect of morphia is manifested at first in the ear becoming cooler. These injection are useless in hystery. M. concludes that many cases of beginning melancholy can be cured by this method.—*Allg. med. Central Ztg.*

Resection of the inframaxillary nerve from the mouth is better, because a smaller wound is set, the nerve can be reached higher up, no scars outside and not much bleeding.—*Archiv f. Klin. Chir.*

Iodine in incontinence of urine of old people. One drop of the common tincture is to be given hourly or

every two hours, or $\frac{1}{10}$ grain of iodine in pills. It relieves as long as it is taken, but has no curative effect.—*Union Med.*

Ambergis works like bromide of potassium, but quicker and far shorter time, therefore it is recommendable in severe cases of spasms, especially of children, and in eklampsia.—*L. Osservatore.*

Electric baths in shaking after mercury and alcohol poisoning. Chapot Douvert publishes nine successful cases. He had one Bunsen element, whose positive end was under water on the feet and the negative on the top of the head. A bath of 20 minutes was given every other day, and 22–26 were necessary for a complete cure.—*Ibid.*

Prof. Traube recommends sugar-lead [0.06] in circumscript gangrene of the lungs. But having no antifibrile action, sugar-lead is to be given the best with digitalis [in powder]. Sugar-lead is also good in certain diseases of the urinary bladder, if the water smells badly in consequence of gangrene. T. injects a solution of six to eight centigr. to 180 grammes of water.—*Memorab.*

Prof. Esmarch says hysteric joint-affections don't require local treatment, even rest is obnoxious, he insists upon a general treatment.—*Ibid.*

Brown Sequard recommends carbolic acid in epileptic spasms, strychnine poisoning and bleeding to exhaustion.—*Ibid.*

Prof. Schultzen recommends glycerin and meat-diet in diabetes mellitus. Glycerin purissim. 20.0–50.0; water 2℥; citric or tartaric acid 5.0, s. for one day. Sometimes diarrhœa and nausea occur after larger doses. As long as glycerin is given all symptoms of diabetes dis-

appear, but it is not proved whether it has curative power or not.—*Ibid.*

Dr. Gossman, of Spiegelberg's clinic, treated successfully twenty cases of puerperal parametritis by chloride of silver. He gave 0.01 hourly, in pills. Leeches and warm poultices were applied to.—*Berlin. Klin. Wochen.*

Reviews.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF MICHIGAN, for the year 1872.

This is a volume of 117 pages, upon good paper, and contains several interesting articles. The first that strikes our attention upon opening the pamphlet is the interminable code of ethics of the American Medical Association. We suppose it is necessary to place this fundamental law in the transactions of State Societies, but why we can not tell. As well might we expect to find the twelve commandments in the front of every history, or the constitution of the United States in connection with codes of State laws.

Following this comes the "President's (O. Hitchcock, M. D.) address," "Modern Medicine, its Status in Modern Times." After a resume of ancient medicine, commencing with a deserved *laudatum* to Hippocrates as the apostle of rational medicine, he gives a lengthy outline of the causes of degeneration medicine suffered during long years, until the sixteenth century when Eustachius, Fallopius and others arose. The president makes it plainly appear that however true the doctrine of Sir John Lacoek in regard to the gradual but steady progress from a less to a more perfect development may be with man, it does not apply to the science and art of medicines, for the good was at the two extremes of time,

while the interval was chaotic. The philosophy of the history of medicine is indeed an interesting theme, and one that, treated by a master hand, might become as instructive as interesting. Certainly this is true, but why! and how! We think our great advance is in consequence of our increased knowledge of instrumental means of diagnosis. The intelligent ancients and the "old moderns" certainly observed as well as we the various symptoms and the effects of remedies during the progress of the disease, and we have to rejoice that instruments and appliances have been invented for the elucidation of diseases and abnormal action. The boat and how to row it was known to the ancients, no modern could excel them in the management thereof, but still the long and swift voyages could not be made until steam became the propelling power, the proper use of oars was in a great measure lost, not because those before expert had degenerated but from want of experience. The art of navigation was advanced because the skill and cunning of man was changed from the less to the more perfect instrument. So with medicine, the ophthalmoscope, laryngoscope, stethoscope, etc., are instruments the old moderns did not possess, means by which the art and science has been advanced, and yet not detracting one iota from the fame due the "fathers" whose means of gaining knowledge they had used perhaps more than we, and that which has been common stock of the century we doubt much if any material progress can be observed in it; human nature is the same, and there have been as keen observers *before as contemporaneous* with us.

In the next paper, "on the Sickness and Vomiting of Pregnancy," by W. H. DeCamp, M. D., of Grand Rapids. We have the claim of oxalate of arsenic, ceruim, and calomel specially set forth.

"Experience has taught which particular remedy to give in each case. Where the vomited matter contains much bile, with a brownish or yellow coating of the

tongue, with other evidence of the disorder of the liver, our remedy is the calomel. When they complain of acidity of stomach with distress from eating, then the remedy is cerium. By far the greater portion of cases are those that loathe smell, taste, or even thought, of food. Many I have known to go for days without eating, to avoid this, where the morning sickness caused them no great suffering. Others have a great flow of saliva, which, if swallowed, is sure to produce sickness or vomiting.

"These are the cases, where, of all other remedies, the arsenic is the one that has never failed to give almost immediate relief, either temporarily or permanently."

A report of the Committee on Vital Statistics, by H. B. Baker, M. D., Chairman. Discusses a subject of great interest to the laymen as well as to the medical profession. We hope that the day is not far distant when efficient regulations with reference to this subject will be made in our own State. "State medicine" is at a discount here, as we fear it is also in Michigan. While hundreds of non-operating laws are passed, we have nothing looking towards the establishment of a "State Board of Health." A "Bureau of Vital Statistics" ought to be established, as it now is dark and unsatisfactory, and the material lost might be worked up into a form of lasting benefit to the state and every individual therein.

A very sensible paper on "Medical Legislation," by Wm. Parmenter, M. D., Vermontville, Michigan, appears. In this he asks and answers the following questions:

"The question arises, How shall we obtain better doctors, and, ultimately, better medicine? Shall we leave it to the law of demand and supply,—the law of trade? Shall we attempt to instruct the people in the general principles of therapeutics, and thus cut off quackery from its supplies? Shall we trust to individual aspira-

tion for something better? or shall we evoke the aid of law, to enforce a better culture?"

As to leaving it to the "laws of trade" he concludes:

"There is no encouragement to rational medicine as against the pathies, to be drawn from the general intelligence of society."

As to the probability of instructing the people, he says:

"The unsettled state of therapeutical science must be admitted, and hence the impossibility of instructing the people in principles which we do not understand ourselves."

The want of method is adduced as proof of the fallacy in expecting much general good to result from "individual aspirations:

"Besides, there is no concerted, organized effort to study and observe the same disease at the same time, under the varying influences just mentioned. Nor can there be, so long as the profession is largely filled with incapables."

He considered a law that demanded that "it should require of every one, a good degree of attainment in all the established principles of medicine and its kindred sciences."

He truthfully says: "It should allow the pathies the largest liberty in medical practice. It should establish one examining board (or, at most, two) for the whole State, whose certificate of qualification shall be the sole and indispensable requisite for commencing medical practice in the State. It should require a registration of all physicians in the county in which they reside. To which it might be well to add, that any person employing a physician not registered, may not plead this fact in bar of payment for his services."

As an example of such a law and its working he instances that of 1869 in Canada: "Allowing every candidate for medical license perfect freedom to choose

between rational medicine and baseless theories, at the annual examination in 1871, *not one* applicant asked to be registered as an eclectic or homœopath."

All this is sound sense, and we hope, before another year shall pass, we shall be another example to our Northern friends of such another law.

There is one point in his sketch of the details of such a law we would mention. Every individual should not only be *examined*, but before such examination should have received a diploma from some accredited School of Medicine.

A very interesting history of an "amputation at the hip joint," by Dr. Theodore A. McGraw, of Detroit College, comes next. The patient had suffered five operations for a tumor, involving the whole thickness of the thigh." The medullary cavity was found "full of a thick, yellowish matter, not unlike pus." In this operation the effect of inhalation of oxygen gas was observed, it being used during the operation as an "arterial stimulant." The color would return, the pulse increase in volume, respiration grow more full and easy, and nausea temporarily cease."

The Doctor's conclusions are worthy of attention, "That all tumors, however simple, after resisting treatment for one year, should be removed, if it can be done without danger to the patient," and that "operations at the hip joint can not be more dangerous than amputation immediately below the trochanters," having "better flaps" and "no risks of osteo-myelitis." Such reports are eminently worthy of a place in the transactions.

The "Report upon the Detroit Medical College," is a history of how they do things in that institution. We suppose it possible that this article has found its appropriate place, but would it not be as well to have inserted it in the shape of an announcement of said college?

"On the use of the Ophthalmoscope," by J. F. Noyes, M. D., closes the volume. A number of interesting

cases are given illustration of its use. The views of Dr. Vance as to the value of the instrument in the diagnosis and treatment of epilepsy is fully endorsed. Our space will not permit us to continue this review as we would wish, and we have only to say that we consider such volumes of as much interest to the profession as that of special monographs.

Book Notices.

THE relation of Epilepsy to Insanity and Jurisprudence, by W. J. Conklin, M. D., Dayton, Ohio. Read before the Ohio State Medical Society, April 6, 1871.

TRANSACTIONS of the Georgia State Medical Association, at its twenty-third annual meeting, held in Columbia, Georgia, on the 10th, 11th and 12th of April, 1872.

ANNUAL Announcement and Circular of Long Island College Hospital, session, 1873, Brooklyn, N. Y.

AN Illustrated Catalogue, the Medical and Scientific publications of William Wood & Co., 27 Green street, New York.

THE Physician and Surgeon, Baltimore, Maryland, a monthly.

CIRCULAR of information of the Bureau of Education, for March, 1872. 1. An enquiry concerning the vital statistics of College graduates. 2. Distribution of College students in 70-71. 3. Parts of vital statistics in the United States, with tables and Diagrams. Washington, D. C.

THE Ten Laws of Health, or how diseases are produced and can be prevented, by J. R. Black, M. D. J. B. Lippencott & Co., Phil., 1872.

CONTAGIOUS Disease—practical lessons in the nature and treatment of the affections produced by, with an account of the primary syphilitic poison, and of its communicability, by John Morgan, A. M., M. D.

GENERAL and differential diagnosis of Ovarian Tumors, with special reference to the operation of ovariectomy, and occasional pathological and therapeutical consideration, by Washington L. Atlee, M. D., with 39 illustrations. Philadelphia, J. B. Lippencott & Co., publishers.

OVARIAN Tumors, their pathology, diagnosis and treatment, by E. Randolph Peaslee, M. D., LL. D. D. Appleton & Co., 547 and 551 Broadway, New York, 1872.

THERMIC Fever or Sun Stroke, by H. C. Wood, Jr., M. D., Boylston prize essay. J. B. Lippencott & Co., 1872.

TRANSACTIONS of the American Medical Association, instituted 1847, Philadelphia, 1872.

DISEASES of the Throat, a guide to the diagnosis and treatment of affection of the pharynx, œsophagus, trachea, larynx and nasal passages, by J. Solis Cohen, M. D., lecturer on laryngoscopy and diseases of the throat and chest, in Jefferson Medical College, Philadelphia, etc., with 133 illustrations on wood; New York, William Wood & Co.; for sale by Catheart & Cleland, Indianapolis, 1872. A very comprehensive treatise, although the author in his preface says, its "moderate size precludes the composition of an exhaustive treatise on the subject of diseases of the throat." We are inclined to think that the practitioner will find about all that is necessary to guide him in investigating and treating such cases. Such treatises is the "stuff of which true medical literature is made, and where true science and progress is found."

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

UPON the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

WE received "another card" from Dr. Wilson Hobbs, of Carthage, Ind., in reply to Dr. Cominger's note in the last number. As we have gone as far with the matter as our rules will allow us, especially as we do not see any present points in the doctor's communication—merely repeating the former assertion—we will decline. We are glad to hear from both the gentlemen, but hope they will see the propriety of stopping where they are. If you have any *fresh* corps, gentlemen, please "trot them out."

CATALOGUES.—Lindsay & Blackiston have issued a catalogue of Medical Works, showing prices, etc. The profession will find it convenient to refer to. Obtained of L. & B., Philadelphia, Pa.

Miscellaneous.

ON THE COMBINED ACTION OF MORPHINE AND CHLOROFORM.—In a communication of M. M. L. Labe and E. Guyon, placed before the Academy of Sciences of Paris, the following remarks were made: “M. Cl. Bernard has raised the important question, and partly demonstrated to us, that it is possible, by combining the action of morphine with chloroform, to obtain a state of profound and complete anæsthesia, with a much less quantity of chloroform than is ordinarily used in applying that agent alone. In experiments upon dogs after an injection of morphia beneath the skin, anæsthesia was quickly produced and prolonged, although the quantity of chloroform absorbed was very little.

At the same time M. Cl. Bernard was conducting his experiments, Nusbaum, of Munich, similarly observed the same phenomena in a woman, who had, during the course of an operation, absorbed a large quantity of chloroform. This surgeon not wishing to administer it too long, through fear of it inducing fatal syncope, was struck with the idea of administering an enema with a small quantity of morphia dissolved in it, he then observed that the anæsthesia was prolonged for a longer time than before. Two surgeons of Strasburg made researches on the same subject with the same result. In operations performed in the Hospital la Pitie, M. Labbe in four cases injected chlorohydrate of morphia under the skin, following it with chloroform, and from the results obtained came to the conclusion that anæsthesia is more safe and quick by combining the action of chloroform with morphia; that the anæsthesia is of longer duration and will be prolonged for a longer time by smaller doses of chloroform, and consequently the risks of accidental deaths are considerably diminished.—*Medical Press and Circular*.—*Detroit Review of Medicine*.

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Original Communications.

CARDIAC NEURALGIA.

Read before the Brainard Medical Society, June 17.

BY W. H. BELL, M. D., LOGANSPORT, IND.

(*Concluded from June Number.*)

Treatment—While instituting any rational course of treatment, having for its object the most speedy removal of the disease, the first consideration that will occupy the mind of the medical adviser, and it is one which, if not duly weighed and considered in its due relation to treatment, that will have its marked influence in the percentage of recoveries in any given number of cases, is the fact that the heart affection is nothing more or less than the expression of an exceedingly irritable state of the nervous system, localizing itself in the heart, which indicates loss of vital power in the general system, and a low degree of nutrition in certain nerve centres, which preside over and supply, in a measure, cardiac motor power.

The efforts of the physician will then be early directed to the removal and neutralization of certain toxic influences, existing in the circulation, whose tendency is always to induce the condition above described; to the restoration of wasted tissue; to efforts tending towards

the due development in the brain and cord centres of healthy nerve cells, which are to replace those hitherto nourished by a defective nutrition. For the accomplishment of this purpose, the flagging assimilative powers must be stimulated by a full and well regulated diet, to be supplied frequently, and in small quantities, if digestion be weak—the liquid form being, at the same time, most desirable, as it is most likely to be tolerated by an irritable stomach. The following articles will readily suggest themselves: Beef essence, a mixture of milk and cream, rice milk and cream, arrowroot, blancmange, mutton broth, beef tea with oat meal, and white wine whey, or oyster soup. When the stomach is able to digest solids, the different varieties of meats, beginning with mutton if there is no objection to it, should be given, with a mixed vegetable diet; and as a dressing for which, some oily substance should enter largely. Indeed, it is from the oily constituents that the invalid experiences the greatest benefit. I have lately been in the habit of giving cod liver oil in large doses, because of its readily assimilative qualities, and have made it as it were an adjuvant of the food giving.

Cases are often met with where the only ingredients of food are tolerated with difficulty. Indeed, occasionally, when all other articles of diet are looked upon with loathing and disgust, pancreatine here answers a most excellent purpose, or a mixture of dilute hydrochloric and hydrocyanic acids, suspended in syrup, given three or four times a day, soon induces a desire for food. I have often observed that loathing for food has been closely connected with deficient secretion of the gastric fluid. The hydrochloric acid temporarily takes the place of this secretion, and assists digestion until the gastric glands are once more enabled to resume their function. Connected with deficient secretion of gastric juice, is a hypersthetic state of the gastric mucous membrane, and this condition is most effectually allayed by the dilute hy-

drocyanic acid. A due amount of exercise in the open air, and stimulating baths, should always be enjoined. The body should be warmly clothed in flannels, and should never be exposed to a cold and damp atmosphere. This remark cannot be too strongly insisted on in all neuralgias, whatever their seat. Relapses are sometimes to be ascribed to the neglect of this precaution. All evil influences and emotions that have a tendency to disturb the heart's action, must be studiously avoided; the same may be said of excessive physical exercise. Attacks of flatulence must be guarded against, for, as Dr. Austie remarks, "it is quite capable of embarrassing the action of the heart to a degree which, though it might be trivial in the case of ordinary health, may prove fatal by exciting a flabby ventricle to irregular and embarrassed contraction. It is even possible that the strong irritation set up by some varieties of indigestible food, might propagate an irritation of the spinal cord, which would produce an interactory paralysis at once." Dr. Austie is most undoubtedly correct, and I am strongly inclined to think that some of the instances of sudden death from diseased heart that we hear of, might be set down to the above cause. How often we hear of these instances happening around us, and how little is generally known as to the pathological causes operating in the cases in question. This field of observation can still be cultivated to a very considerable extent.

Instances of cardiac neuralgia, that have had an antecedent history of rheumatism, are in fact but a result of rheumatic blood poisoning, and are most easily managed by directing treatment to the primary disease. Alkalies, alternated with a course of colchicum, and later by the following: *Ferri Citras+Quinia Citras+Potas Iodid+Infres Quassia*, to be given three times a day, will result in a cure. Sometimes the following *R* given early, and followed up with some mild tonic, is all that will be necessary: *R Ferri. Potas. Tart. ʒ iij, Potas. Iodide ʒ i,*

Potas. Bicarb. ʒ iv, Infus. Columbæ ʒ iij. A tablespoonful three times a day.

When the neuralgia is caused by malarial poisoning, and this sometimes happens in our climate, quinia is the remedy called for; it should be given frequently, and in large doses, with the dovers powder, until the poison is effectually neutralized, and then the following persevered in for some time: R Liquor Potas. Arsenic ʒ iss, Acid Sulph. Aromat. ʒ ii, Quinia Sulph. ʒ ii, Syrup Tolutina 9 T. to ft. ʒ $\frac{1}{10}$, mix. A tablespoonful three times a day, after meals.

In pure, uncomplicated cases of malarial cardiac neuralgia, the above is very effectual.

When lead poisoning proves to be the cause of the heart affection, the iodide of potassium in full doses, soon leads to a complete cure.

When no specific poison can be detected, the physician will then be guided by rules quite different from those already mentioned. His attention will be directed more especially to the nervous centers with their nerves. The condition existing there will be one of anæmia, and the indication will be to replace it with a more vigorous state of the circulation, not only in the brain and cord, but in the system generally. There are one or two special medicinal remedies that exert, through the trophic nervous system, a direct influence on the nutrition of the heart's muscular texture. It must be remembered that one of the most frequent, and at the same time untoward complications of cardiac neuralgia, is a ventricle with thin dilated, flabby walls, owing, in a great measure, to partial degeneration having taken place there. It seems that digitalis given in moderate doses, and persevered in for some time, has considerable influence towards checking this tendency to cardiac degeneration; under its action the radical pulse gains its tone and volume, demonstrating as it does a greater tonicity imparted to the circulatory system. The correspondence between the heart's

contraction and the pulse also becomes more equitably adjusted, and a normal rythm is established. I usually combine the digitalis with the muriated tincture of iron, as in the following R: Fr. Digitalis 3 iij, Tr. Ferri Chlor. 3, Syrup Tolutani 9 T. to ft. $\frac{3}{4}$ iv, mix. A tablespoonful every six hours. The resulting black mixture denoting chemical action, does not in the least interfere with the action of the digitalis. As to the accumulative tendency of this remedy, I cannot help stating that, after an experience in its use, while making diseases of the mind a specialty, I have never once noted a well marked instance of its accumulative action, and it seems to me most probable that if such a phenomenon ever occurs, it must be very seldom, and may be due rather to some idiosyncrasy of the patient, than to any peculiar action of the remedy. In some cases of acute exhaustive insanity, its administration to the extent of a drachm of the tincture every four hours, for one, or even two consecutive days, has been attended with no other effect than soothing the excited pulse, and calming the maniacal paroxysm.

Another remedy of special importance in the earlier stages of cordiac neuralgia is strychnia; like digitalis, it exerts a direct trophic influence on the heart. I much prefer combining it with the muriate tincture of iron, in the proportion of ten or twelve drops of the tincture to $\frac{1}{40}$ of a grain of the strychnia, to be gradually increased to twenty drops of tincture, and $\frac{1}{20}$ or $\frac{1}{15}$ of a grain of the alkaloid. It should be given three times a day, immediately after meals, and is then taken up with the food. The above combination answers a most excellent purpose, especially in anæmic cases. These remarks apply with equal force to the triple phosphate of quinia, iron and strychnia—though every patient will not tolerate this last named mixture; indeed, in one case I observed the palpitation to be increased by it. Another and very important prophylactic tonic is arsenic. Dr. Austie, speaking of it observes, “that this drug should

prove useful, in cardiac neuroses; might readily be anticipated, from its very great utility in many cases of asthma, a disease which as already remarked, has a close relationship to the former." It should be given in from two to five drops of Fowler's solution, three times a day after meals, and steadily persevered in for some time; the addition of very minute doses of belladonna, add to its tonic influence. The action of the remedy should be carefully watched, as it sometimes produces diarrhœa with cramp in the bowels and great pain. This action is sometimes overcome by combining it with opium. But in these cases I always hesitate to use it, as I fancy such persons possess a predisposition to arsenical poisoning. Zinc has been also highly recommended—the sulphate and the oxide are the forms in which it has been given. A steady perseverance in the line of treatment indicated, will finally result in decided amelioration of those lesser forms of cardiac neuralgia, which occur more often than has generally been supposed, and very frequently defeat the efforts of the physician from a mistaken diagnosis. This course not only results in amelioration, but very often in a complete cure, and the patient will express himself as feeling better, being able to endure more fatigue than has for many months before.

Cardiac irritability with pain is sometimes produced by flatulent distention of the stomach. All of us have observed, without knowing exactly why, the obscure connection between gastric and cardiac disorder.

The flatus is not always the product of disintegrating food, but at times seems to be freely secreted from the gastric mucous membrane while it is under a condition of enfeebled innervation.

D. C. Handfield Jones, recommends in such cases "creosote in pills, with quinine and a little ginger, or creosote in solution, with muriatic acid and tr. columbæ." When the distension is due to undigested food, a mustard emetic should be administered, followed after-

ward with an opium and quinine pill, to act as a nervous sedative.

In some instances of cardiac neuralgia the use of tea will have to be forbidden—on account of its tendency to disturb the heart's action. The same may be said of tobacco in certain constitutions. Coffee sometimes is attended with ill effects, though not so often as either of the above.

It now merely remains for me to draw attention to the treatment necessary during the auginal paroxysm. Promptness and decision are perquisites to success. Nothing answers so well in allaying the agonizing pain and distress as sulphuric ether; it should be given in syrup or mucilage, in half drachm doses, and should be repeated in half an hour or at longer intervals, according to the exigencies of the case.

When the patient falls pale and pulseless, stimulents in the shape of brandy or wine are excellent adjuncts to the ether treatment. Belladonna also soon restores volun and force to a weakly contracting heart—this it does through its influence on the sympathetic.

The nitrite of amyl is another remedy that before long will come into extensive use, as a remedy possessing great powers, in cutting short the acute attack. Dr. Austie thus speaks of it, “nitrite of amyl is a highly vaporizable fluid, which possesses the following remarkable physiological action—the inhalation even of a very small quantity, is followed after a minute or so, by a sudden acceleration of the heart's action, accompanied by intense crimson congestion of the vessels of the face and conjuction, and a sense of enormous fullness in the head—these phenomena are extremely fugitive, passing away completely in two or three minutes, unless the inhalation is received. Comparative examinations with the sphymograph during the intervals and during the paroxysms, made strikingly manifests the fact, that during the attacks there was an increase of arterial tension

which was directly proportionate to the severity of the pain and cardiac impairment. It was suggested that nitrate of amyl, by relieving the systemic arteries, might remove the material tension and give relief to the pain, and the result conformed the hope; doses of from five to ten drops were inhaled from a towel, with the uniform result of at once quieting the pain; it might return in a few minutes, but a second dose usually removed it entirely for many hours."

Chloroform should not be used, as its administration is attended with very considerable danger, more especially that of completely suspending the heart's action.

The most prompt and marked relief has been obtained in the algide paroxysm, by immersing the patient in a hot bath. I think I can look back to one case whose life was saved by this means.

STRAMONIUM POISONING.

BY G. W. KEMPER, M. D., OF MUNCIE, IND.

The patient was a little girl, six years of age. After a day of usual health, she was seized at 6 P. M. with hoarseness, which led the friends to fear cramp. I was called at once to see her. The face was flushed, but she had no fever. Respiration quickened but little. Delirium supervened. Incontinence of urine. Nausea, but no vomiting. The arms and legs were rather tossed than convulsed in a tremulous manner. Occasionally she clutched at her throat, and even tried to bite her arms. She would frequently cry and fret, but could not be aroused to consciousness.

Upon separating the eyelids, which were tightly closed, I found the pupils so dilated that they embraced nearly all the iris. This symptom led me to suspect poisoning by some narcotic, and I at once administered an emetic dose of sulphate of zinc.

The stomach was unable to respond to the emetic, but after about thirty minutes she vomited freely of a quantity of masticated apples and a large number of brown colored seeds, which, upon comparison, proved to be stramonium seeds.

Soon after vomiting, the symptoms improved, but she was restless and sleepless nearly all night, until quieted by bromide of potassium. At 9 o'clock next morning she was much better, but unable to walk alone, singularly falling backwards when she attempted to do so. The pupils were greatly reduced in size. Hallucinations were occasionally present—saw “lots of little birds flying about the room.”

The seeds were about one-half ripe, the frost having opened the capsule. From circumstances it was supposed that she ate the seed about 3 o'clock, P. M., and the throat symptoms began about 6 P. M. She said afterward that the seed tasted bitter, but she liked to hear them “pop” between her teeth.

AN ANSWER TO CRITICS.

BY J. THOMPSON, M. D., INDIANAPOLIS, IND.

In the October number of this journal I find an article from the pen of Dr. W. B. Fletcher, styled a “Review of the Transactions of the Indiana State Medical Society.”

Now, as I happen to be one of the number reviewed, I hereby propose a few words for the benefit of the reviewer.

After speaking quite flippantly concerning the essay of Dr. R. E. Haughton, of Richmond, Indiana, the doctor remarks:

“While speaking of professional ambiguity—or papers written as men never talk—we might mention one on ‘Anomalies of Refraction and Accommodation.’ A paper that shows the work of the specialist, written in

just the right style for a meeting of oculists, and in a manner calculated to advise all the general practitioners that they know but little about such matters, and had better send them to the specialist.

'Out of old fields cometh all this new corn,
Out of old books cometh all these new things
That men must learn.'

In reviewing Dr. Haughton, the doctor tries to act the wit, but all will see at a glance that his witticisms are second-hand. We will, however, leave this part to Dr. Haughton, as he is fully able to answer this cynosure.

The doctor speaks of "professional ambiguity." By this we are to infer that the language of the paper is susceptible of a double interpretation, as were the oracles of the heathen deities. Can any one else say the same of the paper?

"Written as men never talk."

Had Dr. Fletcher ever returned the call which I made him, when I first took up my residence in this city, over one year ago, then would he have found that I talk just as I write.

"Written in just the right style for a meeting of oculists."

The style spoken of was the one above all others which the writer tried to avoid.

"And in a manner calculated to advise all the general practitioners that they know but little about such matters," etc., etc. In answer to the above, the writer can truthfully state that such was not his intention, and that he never has assumed or arrogated to himself that which does not become him.

But, if one studies in a special department, is it not reasonable that one confine one's self to that specialty?

Again: If one's audience, in the press of business, has partially neglected the study of any specialty, is one to be condemned and ridiculed for introducing said subject?

Or, on the other hand, suppose all have studied the subject, is one to avoid writing on the same?

Surely the adoption, and the enforcement of the affirmation of either, would render medical societies useless.

It is the opinion of the writer that a majority of his professional brethren differed in opinion from the reviewer, or the paper never would have been published.

"Out of old fields cometh all this new corn,
Out of old books cometh all these new things," etc., etc.

If from the above quotation the doctor wishes to convey the idea that the paper was a plagiarism I pronounce it an untruth. But if he simply means that much has been written by others, which, had the writer not seen the paper in question, could not have been written, then is he correct?

I am quite willing to acknowledge, that had I not studied Donders and Sheffler, the paper could not have been written by myself. Let me ask, however, if this will not apply to nine-tenths of mankind? Is it at all probable that Virgil would have given us the *Æneid* had not Homer left, or produced the *Iliad* and *Odyssey*? Or could Dr. W. B. Fletcher have written an article on "Human Eutozo," which he presented to the State Medical Society in 1866, had he not seen the writings of T. Spencer Cobbold? And we will further add, did he not make a more liberal use of that gentleman's writings than his quotation marks warranted?

Again: Is not the article which brought out his criticisms just as appropriate in the transactions of a State Medical Society, as one on "Sewerage" in those of the Indianapolis Academy of Medicine?

Well does the writer remember that when it was announced in the daily papers of this city, that Dr. W. B. Fletcher would read a paper on the subject of "Sewerage," all the physicians were on the *qui vive*, wondering what was to be brought forth. Was it not a mouse?

Was not that paper "written in just the right style to advise all the general practitioners," city fathers and

civil engineers that they know nothing about such matters? Let me say to the doctor:

"Be sure yourself and your own reach to know,
How far your genius, taste, and learning go;
Launch not beyond your depth, but be discreet,
And mark that point where sense and dullness meet.
Some are bewildered in the maze of schools,
And some made coxcombs nature meant but fools."

The doctor's last criticism is upon the paper of Dr. Chas. E. Wright, (his partner.) Now mark the comparison.

"Although this paper is by a specialist, the author makes it a point to show why the general practitioner should not abandon the study of the different specialties
* * * We can heartily commend the style and matter of this report, being plain, concise and useful."

Of course Dr. Fletcher can commend it, coming as it does from his partner. But his taste is another matter. Not one word have I to say against the paper of Dr. Wright, for it is a remarkably well written one.

"Makes it a point to show why the general practitioner should not abandon the study of the different specialties." Then we ask, why object to my paper?

It will be remembered, however, that in the Transactions of the Indiana State Medical Society, 1871, an article appeared, and a case was reported, which came under the head of Anomalies of Accommodation. Why did not Dr. Fletcher criticise it? Because it came from his partner. So it appears to make some difference with Dr. Fletcher as to "whose ox is gored." If a partner's production, it is excellent; but if from a professional brother who is the least in the way, then his writings are scarcely to be tolerated.

"But where's the man who counsel can bestow,
Still pleased to teach, and yet not proud to know?
Unbias'd or by favor, or by spite,
Not dully prepossessed nor blindly right;
Though learned, well bred, and though well bred severe,
Modestly bold and humanly sincere;

Who to a friend his faults can freely show,
 And gladly praise the merit of a foe;
 Blessed with a taste exact, yet unconfined,
 A knowledge both of books and human kind;
 Generous, converse, a soul exempt from pride,
 And born to praise, with reason on his side."

In conclusion, permit me to state that the writer would not have been recalcitrant had he been fairly criticised; but when he considers the motives, together with the incompetence of the reviewer, he feels that to let him off without showing him in his true colors, would be encouraging a sciolist.

BIBLICAL MEDICINE.

BY G. W. H. KEMPER, M. D., MUNCIE, IND.

(Continued from June Number.)

MIDWIFE.—The duty of conducting labors¹ was originally assigned to females, although the first² case of labor was undoubtedly attended by a male. The term midwife is first used in Genesis, xxxv, 17, in connection with the last labor of Rachel. Whether she was a professional midwife or not, I have no means of ascertaining. She seems to have had some idea of the³ process of labor, and understood the art of cheering⁴ the drooping spirits of suffering Rachel, for she tells her, "Fear not; thou shalt have this son also." Midwife occurs again in Gen. xxxviii, 28, in connection with the labor of Tamar. In Ex. i, 15.21, two midwives are mentioned by name, "One was Shiprah, and the name of the other⁵ Puah." The Bible says they were Hebrews. Josephus⁶ says they were Egyptians, and his translator (Whiston) aptly⁷ remarks that this is more probable, as Pharaoh would hardly trust the Israelites to carry out so barbarous a command against their own nation. These were evi-

dently professional midwives. From the reading of Josephus I infer that there were other midwives, but that these two were especially detailed to attend the Hebrew women.

PREMATURE BIRTH.—I find the following language in Ex. xxi, 22: "If men strive, and hurt a woman with child, so that her fruit depart from her, and yet no mischief follow," etc. A case is given in 1st Sam., iv, 19: "Phineas' wife was with child, near to be delivered; and when she heard 'the tidings that the Ark of God was taken, and that her father-in-law and her husband were dead, she bowed herself and travailed; for her pains came upon her." She gave birth to a child which lived, but the mother soon died. Josephus says she was seven months advanced in pregnancy when labor took place. I find such allusions to premature births as follows: "Untimely birth." Job iii, 16; Ps. lviii, 8, and Eccl. vi, 3. "A miscarrying womb" is mentioned in Hos. ix, 14.

TWINS.—Two cases are recorded. The first was Rebekah, Gen. xxv, 24. The second Tamar. Genesis xxxviii, 27. In the latter case an arm of one of the children came down, but spontaneously receded.

RACHEL'S LABOR.—It is stated that she had a hard labor. Gen. xxxv, 16. She died soon after delivery. This may have been a premature birth, as she was journeying with her husband when labor took place.

MENSTRUATION.—This function is first referred to in Gen. xviii, 11: "And it ceased to be with Sarah after the manner of women." Nevertheless, after this event, she gave birth to Isaac. A second case is found in Gen. xxxi, 35, where Rachel was excused from rising up because "the custom of women" was upon her. The law of Moses governing menstruating women is detailed in Lev. xv. She was set apart for seven days, and whoever touched her was unclean until even. Other rigid rules

are given. Sexual connection was prohibited during and for seven days after the monthly period. Lev. xviii, 19, and xx, 18. The menstrual fluid was typical of offensiveness. "Thou shalt cast them away as a menstruous cloth." Is. xxx, 32. "Jerusalem is as a menstruous woman among them." Sam. i, 17. "Neither hath come near to a menstruous woman." Ezekial xviii, 6.

BLOODY ISSUES.—In Matt. ix, 20, is recorded a case of a woman who was diseased with an issue of blood of twelve years' duration. It was, doubtless, uterine. We need not necessarily infer that it was an unintermitting hemorrhage. Mark, in narrating the case, says: "And had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse." As a curiosity I will quote the treatment for such cases:

"Take of gum Alexandria, of alum, and of crocus hortensis, the weight of a zuzee each; let them be bruised together and given in wine to the woman who hath an issue of blood. *But if this fails,*

"Take of Persian onions nine logs, boil them in wine, and give it her to drink, and say, 'Arise from thy flux.' *But should this fail,*

"Set her in a place where two ways meet, and let her hold a cup of wine in her hand; and let somebody come behind her and affright her, and say, 'Arise from thy flux.' *But should this do no good,*

"Take a handful of cummin, and a handful of crocus, and a handful of fœnu-Greek; let these be boiled, and given to her to drink, and say, 'Arise from thy flux.' *But should this also fail,*

"Dig seven trenches and burn in them some cuttings of vines not yet circumcised, (vines not five years old,) and let her take in her hand a cup of wine, and let her be led from the trench, and sit down over that; and let her be removed from that and set down over another:

and in each removal say unto her, 'Arise from thy flux.' "

Dr. Lightfoot gives these as a sample out of many others extracted from *Bab. Shabb.* fol. 110. (Clarke's Com.) She touched the hem of Christ's garment and was made whole.

STERILITY.—Barrenness was regarded by the women of the East, and especially the Hebrews, as one of the greatest afflictions that could befall a woman. It was a common affection in the patriarchal age, and almost every traveler through Palestine mentions its frequency at the present day. "The intense desire which many of these poor creatures manifest to become the mother of sons is not a whit less vehement than that of Rachel, who said to Jacob, 'Give me children or else I die.' They also employ the same kind of means to compass their object that were used thousands of years ago. Not only do they resort to all sorts of quacks and medical empirics for relief, but make vows, as did Samuel's mother in Shiloh, when she was in bitterness of soul, and wept sore, and vowed a vow unto the Lord. They also make numerous pilgrimages to such shrines as have obtained a reputation in these matters." *The land and the Book*, vol. 1, p. 176.

Among the promises to the Israelites was this: "There shall not be a male or female barren among you." Deut. vii, 14. Barrenness^{is} referred to in Ps. cxiii, 9, "He maketh the barren woman to keep house, and be a joyful mother of children." The "barren womb" is one of three things mentioned in Prov. xxx, 16, that is never satisfied.

I find ten positive cases of sterility recorded in the Bible. There were others—Abimelech's "maid-servants," but the number is not given. Gen. xx, 17-18, I think, from the reading of Ruth iv, 13, that Ruth was barren, as it states that the "Lord gave her conception," after she married Boaz; and she had no children by her

former husband. Of the ten cases, nine were temporary, and one—Michal—was permanent. They were cured by intercessions with God. I will merely give names and references: Sarah, Gen. xi, 30; Abimelech's wife, Gen. xx, 17-18; Rebekah, Gen. xxv, 21; Leah and Rachel, Gen. xxix, 31-32; Manoah, Jud. xiii, 2; Hannah, 1st Sam. 1-5; Michal, 2d Sam. vi, 23; Shumanite woman, 2d Kings, iv, 14, and Elizabeth, Luke i, 7.

From the marginal reading of 2d Kings, ii, 19-21, we learn that the waters of Jericho were liable to produce sterility, and were remedied by Elisha throwing salt into them.

OVERLAID.—The death of a child caused by overlying is recorded in 1st Kings, iii, 19.

MATERIA MEDICA, ETC.

APOTHECARY.—This word occurs several times in the Bible: Ex. xxx, 25-35, xxxvii, 29; Neh. iii, 8, and Eccl. x, 1. The attention of the apothecary was directed more to the art of perfumery, than the preparation and dispensing of medicines. The holy oils and ointments, were, probably, prepared by one of the priests.

MEDICINES.—A metaphorical allusion is made to medicines in Jer. xxx, 13, and xlvi, 11. "Go up into Gilead, and take balm, O, virgin, the daughter of Egypt; in vain shalt thou use many medicines; for thou shalt not be cured." Medicine is also mentioned in Ezekial, xlvii, 12, and Prov. xvii, 22.

HOLY OINTMENT.—The formula is given in Ex. xxx, 23-24: Pure myrrh, 500 shekels; sweet cinnamon, 250 shekels; sweet calamus, 250 shekels; cassia, 500 shekels; olive oil, 1 hin. This was used simply as an anointing oil.

HOLY PERFUME.—Ex. xxx, 34: Stacte, onycha, galbanum and pure frankincense $\bar{a} \bar{a}$ equal parts. This was also set apart for special purposes, and imitations were prohibited.

Precious ointment, ointment of the spices, ointment of

spikenard, and simply "ointment," are often mentioned.

Oil of myrrh is mention in Est. ii, 12; wine mingled with myrrh, Mark xv, 23, and myrrh and aloes, John xix, 39.

LUMP OF FIGS.—This was Isaiah's prescription for Hezekiah's boil, used as a poultice, 2d Kings, xx, 7.

SOLOMON'S PRESCRIPTION.—"Give strong drink unto him that is ready to perish." Prov. xxxi, 6. A treatise on the use of alcohol that centuries have not improved.

PLACEBO.—In Mark vii, 33, and viii, 23, as well as John ix, 6, it is mentioned that Jesus touched the ears of the deaf man, and applied saliva and clay to the eyes of another who was blind. I can not but indulge the thought that his object was to inspire the persons with confidence and faith and encourage obedience to his directions. Moreover, saliva was a popular remedy for opthalmia at that time, and its application would create some interest. Those people were peculiar, and desired some manifestations, as was exemplified in the case of Naaman, who, when told to go and wash seven times in Jordon, was "wroth" and went away and said, "Behold, I thought, He will surely come out to me, and stand, and call on the name of the Lord his God, and strike his hand over the place."

POOL OF BETHESDA.—The only mention of this pool is in John v, 4. Commentators agree that John was not the author of this verse, but that it was a tradition and was introduced as a preface or explanation for the impotent man being there. Josephus makes no mention of it. I do not doubt the power of the Almighty to heal by such means, but it seems to me rather improbable that such means were used. If it had healed persons of every disease, it must have healed some who were blind. But the astonishment of the Jews at the healing of the blind man by Christ, would seem to indicate that they had never before witnessed such a cure; on

the contrary, they acknowledge that the like had not been known since the world began.

BATHS.—It was one of the civil laws of the Hebrews that the bath should be used. Lev. xiv, 9; xvi, 15; xvii, 15-16; xxii, 6; Num. xix, 7.

PAUL'S PRESCRIPTION.—"Drink no longer water, but use a little wine for thy stomach's sake, and thine often infirmities." 1st Tim. v, 23. Timothy's complaint is unknown.

MUSIC.—This was used with perfect success to quiet and refresh the troubled Saul. 1st Sam. xvi, 23.

In Mark vi, 13, we read that they "anointed with oil many that were sick." This was a common application.

We are told that the man who fell among thieves and was wounded, had his wounds bound up, and oil and wine applied to them. Luke x, 34.

Eyesalve is metaphorically mentioned in Rev. iii, 18.

The wise man knew the advantage of cheerfulness when he wrote: "A merry heart doeth good like a medicine; but a broken spirit drieth the bones." Prov. xvii, 22.

Handkerchiefs and aprons brought from the body of Paul unto the sick healed them miraculously of their diseases. Acts xix, 12.

In James v, 14-15, occurs the following: "Is any sick among you! let him call for the elders of the Church; and let them pray over him, anointing him with oil in the name of the Lord: and the prayer of faith shall save the sick, and the Lord shall raise him up."

DIETETICAL.

HONEY.—This is often referred to as an article of food. 1st Sam. xiv, 27; Prov. xxv, 16-27, and Matt. iii, 4.

PULSE.—Daniel, at one time, confined himself exclusively to a diet of pulse and water; Dan. i: 12. Pulse is composed of the coarser grains, such as peas, beans, etc. Daniel had shortly before been castrated, and he

may purposely have chosen a vegetable diet, as the most proper one.

WILD GOURDS.—In 2d Kings iv : 38–41, is an account of a party who were likely to be poisoned by partaking of a pottage of “wild gourds.” Elisha deprived it of its poisonous properties by casting meal into the pot. The Latin Bible says it was “wild colocynth.” Modern travelers suppose it to have been elaterium.

MANNA.—This remarkable substance was miraculously supplied to the Israelites during their journey through the wilderness. It is described in Ex. xvi : 15–21, and Num. xi. In Ps. lxxviii : 25, it is styled “Angels’ food.”

In Rom. xiv : 2, we read : “For one believeth that he may eat all things; another, who is weak, eateth herbs.” We have the same class of “weak” persons subsisting on “herbs” at the present day!

The clean and unclean meats are enumerated in Lev. xi.

CHEMICAL COMPOUNDS.

“Salt” is mentioned 21 times; vinegar 11; nitre 2, and lime 2.

I find two passages relating to chemical changes : “As vinegar upon nitre, so is he that singeth songs to a heavy heart.” Prov. xxv : 20. “He burned the bones of the king of Edom into lime.” Amos ii : 1.

PATHOLOGICAL.

DIAPEDESIS.—According to Luke xxii : 44, in describing the agony of our Savior, “His sweat was, as it were, great drops of blood falling down to the ground.” The mental anguish of Jesus, at the time he underwent this process, was exceedingly great. The human body was too weak for the Divine mind. It is somewhat strange that there should be so much quibbling over this phenomenon, when the records of medicine furnish so many cases. Charles IX of France, a cruel and infamous sovereign, tortured by remorse, on the approach of death,

was bathed in a bloody sweat. Lombard tells of a general similarly affected by the mortification or dread of the consequences of loosing a battle. Other cases are mentioned in Chapman on Eruptive Fevers, p. 256. An interesting case, occurring in a hysterical woman, is quoted in the *Medical News*, 1865, p. 108. See, also, several cases mentioned in Jones' Functional Nervous Disorders, p. 281.

VOMITING from fulness is referred to in Prov. xxv : 16.

Clinics.

BEFORE THE CLASS AT INDIANA MEDICAL COLLEGE.

REPORTED BY W. D. M'CLINTOCK.

Oct. 16th. PROF. COMINGOR: Gentlemen, we present at this our first clinic this little girl aged six years. She presents a very interesting case indeed. She is suffering with tumor of the eye ball. In determining the nature of tumors we invariably divide them into two classes—malignant and non-malignant or innocent. Authors differ in opinion with regard to the nature of malignant tumors. Some assert that they arise primarily from a local cause and have a tendency to affect the constitution. The opposite opinion is held by a majority of the best authors. Innocent tumors are strictly local.

This little girl was attacked three years ago with brain fever. The tumor manifested itself immediately after her recovery. The lymphatic glands in the region of the parotid are enlarged. The greater portion of the lower eyelid is destroyed. She suffers very much at night. Manifests no disposition to play in open air. My diagnosis is cancerous tumor of the eyeball of the encephaloid variety. Extirpation of the tumor alone will re-

lieve the patient. We propose putting the child under the influence of chloroform; then we will administer ether, as the rate of mortality from the use of the latter is not so great as of the former. In removing malignant tumors the earlier the operation is performed the greater the certainty of cure and the less the liability of recurrence. We will pass a strong thread through the eyeball that we may have good control of it. (The Professor then proceeded to extirpate the tumor with the knife, removing the lower eyelid and the affected adjacent structures.—REP.) We will fill the socket with lint and apply a compress and bandage until suppuration occurs; then we will apply a solution composed of two parts carbolic acid to twelve parts of water. The constitutional treatment will be two or three drops of Fowler's Solution three times daily.

SECOND CASE PRESENTED BY PROF. COMINGOR.

Gentlemen, I will now present a woman having an indolent ulcer in the anterior tibial region of seven years' standing. She says it has almost healed several times, but a slight bruise, or scratch would cause it to become sore again. You will have occasion to treat ulcers of this kind very often in your practice, and will find some of them very difficult to heal. They are found most frequently in broken down constitutions, and among laboring classes. In this case no benefit has been derived from the application of adhesive straps and bandage. We purpose endeavoring to heal this ulcer by the operation of transplantation. (The Professor then cut off small portions of cuticle from the calf of the sound limb and planted them upon the granulated surface of the ulcer; after which he applied adhesive straps and bandage. Seven days afterward the patient was brought before the class. The condition of the ulcer was very much improved. Minute patches of healthy

cuticle were observed at the points of the transplantation.—REP.)

Oct. 22d. PROF. COMINGOR: Gentlemen, this boy, John Daet, 15 years, presents an interesting case for your consideration. In July his foot was pricked by a thorn or stung by an insect. This was followed by very considerable constitutional disturbance, febrile movement, etc. The lymphatic, inguinal and cervical glands are enlarged. The simple ulcer on his foot would not occasion such enlargements of the glands, therefore there must be some constitutional vice of system. We will prescribe: R Tinct. cincho. comp., f̄ssiv, Iod. Potass., ʒiiss, M. Sig. teaspoonful three times daily.

Reviews.

AN EXAMINATION OF PROF. REESE'S "REVIEW OF THE TRIAL OF MRS. WHARTON FOR THE MURDER OF GEN. KETCHUM." By Philip C. Williams, M. D., of Baltimore, Maryland. Reprinted from Medical and Surgical Reporter: Turnbull Brothers, Baltimore, 1872.

We read the criticism of Dr. Reese upon the analysis and testimony of Aikin, Loney, Craig, and others, in the above mentioned case. Said article will be found in the April number, 1872, of the *American Journal of the Medical Sciences*. In an article of our own we used the following language, based upon such reading:

*Again, in the case of Ketchum, of Baltimore, antimony was asserted found, and yet, in an article in the *American Journal of Medical Science*, April, 1872, Prof. Reese, of the University of Pennsylvania, says that a mixture of gelsemium and chloral (medicines given during Ketchum's illness) would give the same precipitate, presenting the same characteristics as the one obtained in this case with sulphuretted hydrogen. Dr. Aikin, who performed

* Transactions of Indiana State Society, 1872. Art "Medico Legal Science."

the analysis, by his failure in separating the organic matter, rendered his analysis of no account. If we be correct, this must be added to the list of mistakes."

It is always best to have both sides of the case before us before we pass judgment, and even then we may fail to form a correct one. Certainly nothing said in our article referred to with reference to the crime necessary for a correct analysis or the frequency of faulty ones, will be taken back. But in connection with the Journal quoted above, we deem it but proper to give the language of both Dr. Reese and Dr. Williams, who is the mouth-piece of these gentlemen, criticised by the former.

Dr. Reese quotes Dr. Aikin :

"In testing portion B. for antimony, he 'added an excess of tartaric acid, filtered it, and examined the filtrate with sulphuretted hydrogen.' He deemed 'there was no necessity for destroying the organic matter.' The precipitate thus obtained was 'reddish-brown, or brownish-red.' When this was 'separated and dried, it dissolved in muriatic acid; this solution when dropped into water, gave a white precipitate; that white precipitate became orange-red, when treated with sulphide of ammonium; and it was soluble in tartaric acid.' This completed all that was necessary to satisfy me of the presence of antimony; I know nothing that would have produced these results except some preparation of antimony.'"

And adds :

"But, it will be alleged that, in testing for antimony, the orange-red precipitate must be subjected to farther proofs, viz: its solution in boiling hydrochloric acid; the giving a copious white precipitate when this solution is thrown into water; the solubility of this white precipitate in tartaric acid; and the change of color in this same precipitate into orange-red when touched with sulphide of ammonium. Now, how far will the organic precipitate from gelsemium, chloral, etc., follow out the above particulars? We reply, that the singular analogy

holds good in every particular *except one*—the *solubility* of the *white precipitate* (or *cloud*, according to Prof. Aikin) in *tartaric acid*. Thus, the orange-red organic precipitate is, at least partially, soluble in boiling hydrochloric acid; this solution when thrown into water gives a white cloud, which ultimately becomes a precipitate; and this precipitate, if still moist with the acid solution, becomes reddish when touched by sulphide of ammonium. We re-affirm here, what we stated in our evidence, that this discovery of Prof. McCulloch has opened a new and important field of chemical investigation, in relation to this particular line of testing for mineral poisons. Surely, if *three* of the links of this chain of ‘characteristic’ proofs of the presence of antimony be broken, and the only other one left is possibly faulty, the chemist can repose very little confidence in its support. He must look to other less defective tests; in fact, in medico-legal cases, he should be content with nothing short of the production of the metal (in metallic poisons), and that in sufficient quantity to be subjected to *all* the known reactions.”

Dr. Williams says:

“These experiments he (Dr. Reese) says he performed ‘in the presence of Professor Reese, Dr. Genth, and some others,’ and were as follows:—He took the *imitated* contents of Gen. Ketchum’s stomach, containing the chloral and jasmine, and ‘treated it with sulphuretted hydrogen, and obtained a red precipitate which dissolves in hydrochloric acid as that from antimony does; in other words, the two resemble each other in this property; they act alike; when this solution in hydrochloric acid is dropped in water, it also gives a white cloud just as antimony does; that white cloud is soluble in an excess of *hydrochloric* acid, which is also true of antimony; this solution, with sulphuretted hydrogen, again gives a precipitate which might be mistaken for one of antimony; the resemblance of the reactions is truly remarkable; so much so, that I was astonished when I made the experiment.’

Let us for one moment examine the details of this experiment and compare them with Professor Aikin's analysis, and then we can see clearly how '*identical*' they are. That they may be taken in at a glance, I will put them in parallel columns, viz:—

PROF. AIKIN'S ANALYSIS.	PROF. McCULLOCH'S EXPERIMENT.
Contents of Gen'l K.'s stomach treated with sulphuretted hydrogen.	Mixture representing contents treated with sulphuretted hydrogen.
Produced "a reddish brown precipitate" which "dissolved in <i>boiling</i> hydrochloric acid."	Produced a "red precipitate" which dissolved in <i>cold</i> hydrochloric acid."
This solution dropped in water gave a "white cloud" or precipitate.	Solution dropped in water gave "a white cloud," or precipitate.
"This cloud was dissolved by <i>tartaric acid</i> ."	"This cloud was dissolved in <i>hydrochloric acid</i> ."
This solution treated with sulphuretted hydrogen or sulphide of ammonium gave "a <i>bright orange red precipitate</i> ."	This solution treated with sulphide of ammonium gave a " <i>yellow precipitate</i> ."
	Prof. McCulloch then adds, "I never got a <i>pure orange red</i> from antimony, except when in pure aqueous solution."

In examining these experiments we see several very marked and decided differences. 1st. We find that the antimonial "reddish brown precipitate" required *boiling hydrochloric acid to dissolve it*, while the jasmine precipitate dissolved in *cold* hydrochloric acid.

2d. The *antimonial white cloud* was soluble in *tartaric acid*, but the other required *hydrochloric acid* in order to dissolve it.

3d. The final antimonial precipitate was a *bright orange red*, while the jasmine precipitate was a "*yellow precipitate*," which took a long while to settle down to the bottom of the tube. This experiment was performed in presence of the Court, and the result exhibited in the Court-room; and every one present had the opportunity of seeing that there was not the slightest resemblance between the antimonial and the jasmine precipitates.

It is true that when Professor McCulloch poured the sulphide of ammonium into the solution of jasmine it became a *yellowish red color*, not an *orange red*, and examination showed the fact that the change of color was in the "*supernatant liquid*," and not in the *precipitate*, which

was the *real point of inquiry*. The *supernatant liquid was red, but the precipitate was a dirty white!* and never was either “yellow” or “bright orange red.” The difference was such that not even “*a chemist’s eye*” could have confounded them, unless he was afflicted with *color blindness!* Marked as the difference was that afternoon, the next morning it was very much greater. Fortunately for the cause of truth and justice, the results of this experiment were preserved, and were brought into Court the next morning. Then the red color of the supernatant liquid had become as *black as ink*, and the *precipitate still was white!* The antimonial precipitate was with it, and that retained its *bright orange red color*, which presented a striking contrast with the black of the jasmine.

The tubes containing these results were held up in presence of the Court and jury—the one black, and the other bright red—and the Attorney-General asked Professor McCulloch if that was the “orange red precipitate he had obtained before the jury the day before,” and said “he would be much obliged if he would explain how he had obtained that orange red precipitate!” Professor McCulloch replied “that he informed the jury the day before that it would become darker.” “Yes,” replied the Attorney-General, “but did you tell the jury that it would become black?” “No, sir.” “Did you know that it would become black?” “Yes, sir.” “Well, why did you not tell the jury that it would become black?” Thus vanished the orange red precipitate! After this not “*a chemist’s eye*” could confound the results of these two experiments.”

We take what either side says with reference to the analysis (and it is of that alone we now speak) and we can not fail to notice a difference as to the process as well as to the conditions. There are three points we wish to notice.

1. As to the use of tartaric acid in dissolving the precipitate.

2. As to the changes of color in the original liquor saturated with H_2S .

3. As to the necessity of the production of the metal antimony.

1. Certainly Dr. Reese, taking the *two statements*, failed to follow Dr. Aikin in his work. "All the steps but one corresponded," but that "one" was a vital *one*. Not only is solution in tartaric acid *the* test between antimony and bismuth, but also it is distinctive between antimony and or other substances. So Dr. Reese can not, we think, speak authoritatively in the matter, for he stopped short of the point of knowledge.

2. We do not think Dr. Reese correct in asserting that the orange-red precipitate from H_2S will change to a dark color; the tartrate of antimony and lead, moistened with NH_4_2S will go through the changes of orange-red to black, but not so with the oxychloride of antimony.

Therefore, if it *be true* as to the scene described as occurring in the court room, we think Dr. Reese was upon the road of legitimate experiments in search of knowledge, but that knowledge has not yet been obtained, and such a want ought to have influenced the case.

3. As to the absolute necessity of production of the metal, authorities differ. Taylor, Wormely, etc., do not place it as an "absolute essential," but only as one of the tests. Certainly, however, it adds to the certainty of analysis, and the metal should be produced whenever practicable, and we believe it always *practicable* to do so whenever antimony is in such quantity as to respond to the H_2S . We think Dr. Aikin & Co. would have settled the matter beyond cavil, if instead of being satisfied with *one* test (however good) had added thereto others whereby corroboration would have been beyond question. This we consider the weak point in the case, not but that

the test did respond properly, but that it was not *sustained by others*.

Two lessons can be drawn from viewing the two sides of this question, and if we do not profit by it, *cui bono?*

1. That the best experimenters being but human may *for some reasons* jump to wrong conclusions, and persistently adhering to them.

2. That we should with the greatest care guard all possible weak points and sustain them as necessary—look for criticism and have the answer ready beforehand.

THE MICROSCOPE AND MICROSCOPAL TECHNOLOGY—A

Text book for physicians and students. By Dr. Henrick Frey, Professor of Medicine, Tusech, Switzerland. Translated by George R. Cutter, M. D., Chemical Assistant at New York, Eye and Ear Infirmary, from 4th and last German Editions, Wm. Wood & Co., 27 Great Jones street, New York. For sale by Cathcart & Cleland, Indianapolis, Ind.

This seems to be a complete work upon the subject mentioned, and although we have Carpenter, Beale etc., still we have here more points and subjects elaborated and explained, either more fully or in a different manner from these authors. We certainly concur in his remarks as to the necessity of testing each microscope and relying upon the authority of the maker's name rather than the assertions of those who are interested in the sale, or, as he terms them, "strolling venders." Herein, are medical students and indeed others often deceived and cheated, buying a cheap instrument of a certain asserted powers and quality. First, without knowing or caring who the maker is, and second, without testing it.

The translator gives us, *ad interim*, a short history of the microscope in this country from which we see that we have not been so far behind the supposed "seat of science" (Europe) as many would be supposed to think. S. J. Tentmayer, etc., rank with Aberhamer, Amici, etc., the various improvements as often starting here as there. He gives us full instruction as to mode of injecting,

mentioning the kind and how to use the fluid media and chemical reagents, and as to the manipulation of the instrument.

The microscopical characterments of the various fluids and solids of the body is considered, blood, bone, flesh, sexual and special organs. Taken all in all it is to be considered an accession to medical and scientific literature that could not now be dispensed with.

HAND-BOOK OF COMPOUND MEDICINE. For the Prescribers and Dispensaries, *vade-mecum*. By Arnold J. Cooley: J. B. Lippencott & Co., 1872.

“This little book contains a comprehensive collection of formulas for ‘compound medicines.’ It includes the whole of the class found in the Pharmacopea—those of our leading hospitals, numerous formulas in foreign hospital Pharmacopea and private practice and prospecting preparations and nostrums, commonly called “quack medicines.” ”

So says the Preface: We should imagine it to be a very good work for physicians to refer to.

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc. of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

UPON the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

WE have used W. R. Warner & Co.'s Pills, Granules, etc., and find them act as we desire. This being the best proof of their character, we are well pleased with them and can, recommend them to the profession in all cases where a convenient form is sought of medicine compounded by these gentlemen.

WE have to record the death of Dr. J. B. Lasly, a former student of the Indiana Medical College, who died Nov. 1, 1872, at Crawfordsville, Indiana, from inflammation of the bowels.

THAD. M. STEVENS, M. D., *Dear Sir*:—Below please find copies of certificates as requested, and allow us to assure the profession that this, like our Fluid Extracts, Elixir, and other remedies, shall be "uniform in quality, highly serviceable, as we represent them to be." We quote the words of Drs. Fisher, Trimble, Lyman and Hyde of Chicago. Certificate March 17, 1872.

As it contains the true digestive principle of the animal stomach, it recommends itself as a remedy in dyspepsia and indigestion, and all complaints arising from a weak or disordered stomach. This preparation contains no alcohol, as it is incompatible with pepsin. As a proof-test of its strength, we say on label: "One fluid ounce dissolves ninety grains coagulated albumen." "An adult dose tea to table-spoonful before meals. Children, half to one tea-spoonful." The form so pleasant that children (and it is specially suitable for them) take it as easily as an agreeable lemonade, which by adding a little water it much resembles.

LILLY & PHELAN.

EVANSVILLE, IND., Nov. 18, 1872.

DR. MEARS, *Sir*:—I have examined Messrs. Lilly &

Phelan's mode of preparing their "Aromatic Liquid Pepsin" and find no reason to doubt, but that it contains the pepsin of the pig's stomach, in a form favorable to the full effect of pepsin. I have also used it in my own case for about one week past, and find a good degree of relief.

J. P. DE BRULER, M. D.

I fully concur in the above. M. J. BRAY, M. D.

I am well acquainted with the above named physicians, and have great confidence in their opinions, as expressed in the certificates appended.

GEO. W. MEARS, M. D.

FOR SALE.—I have a good location for sale in rich neighborhood. Good-will of practice, and nice property on easy terms. Address, Dr. G. M. Collins, Shelbyville, Indiana, Box 11.

Miscellaneous.

AN ADDRESS BY THE UNITED STATES CENTENNIAL COMMISSION.—The Congress of the United States has enacted that the completion of the One Hundredth Year of American Independence shall be celebrated by an International Exhibition of the Arts, Manufactures, and Products of the soil and mine, to be held at Philadelphia, in 1876, and has appointed a Commission, consisting of representatives from each State and Territory, to conduct the celebration.

Originating under the auspices of the National Legislature, controlled by a National Commission, and designed as it is to "Commemorate the first Century of our existence, by an exhibition of the natural resources of the country and their development, and of our progress in those arts which benefit mankind, in comparison with those of older nations," it is to the people at large that

the commission look for the aid which is necessary to make the Centennial Celebration the grandest anniversary the world has ever seen.

That the completion of the first century of our existence should be marked by some imposing demonstration is, we believe, the patriotic wish of the people of the whole country. The Congress of the United States has wisely decided that the Birth-day of the Great Republic can be most fittingly celebrated by the universal collection and display of all the trophies of its progress. It is designed to bring together, within a building covering fifty acres, not only the varied productions of our mines and of the soil, but types of all the intellectual triumphs of our citizens, specimens of everything that America can furnish, whether from the brains or the hands of her children, and thus make evident to the world the advancement of which a self-governed people is capable.

In this "Celebration" all nations will be invited to participate; its character be International. Europe will display her arts and manufactures, India her curious fabrics, while newly opened China and Japan will lay bare the treasures which for centuries their ingenious people have been perfecting. Each land will compete in generous rivalry for the palm of superior excellence.

To this grand gathering every zone will contribute its fruits and cereals. No mineral shall be wanting; for what the East lacks the West will supply. Under one roof will the South display in rich luxuriance her growing cotton, and the North in miniature, the ceaseless machinery of her mills converting that cotton into cloth. Each section of the globe will send its best offerings to this exhibition, and each State of the Union, as a member of one united body politic, will show to her sister States and the world, how much she can add to the greatness of the nation if she is a harmonious part.

To make the Centennial Celebration such a success as the patriotism and the pride of every American demands

will require the co-operation of the people of the whole country. The United States Centennial Commission has received no Government aid, such as England extended to her World's Fair, and France to her Universal Exposition, yet the labor and responsibility imposed upon the Commission is as great as in either of those undertakings. It is estimated that ten millions of dollars will be required, and this sum Congress has provided shall be raised by stock subscription, and that the people shall have the opportunity of subscribing in proportion to the population of their respective States and Territories.

The Commission looks to the unfailing patriotism of the people of every section, to see that each contributes its share to the expenses, and receives its share of the benefits of an enterprise in which all are so deeply interested. It would further earnestly urge the formation in each State and Territory of a centennial organization, which shall in time see that country associations are formed, so that when the nations are gathered together in 1876 each Commonwealth can view with pride the contributions she has made to the national glory.

Confidently relying on the zeal and patriotism ever displayed by our people in every national undertaking, we pledge and prophecy, that the Centennial Celebration will worthily show how greatness, wealth and intelligence, can be fostered by such institutions as those which have for one hundred years blessed the people of the United States.

JOSEPH R. HAWLEY, *President.*

LEWIS WALN SMITH, *Temporary Secretary.*

A CASE OF HYDROCELE, WITH CARTILAGINOUS THICKENING OF THE TUNICA VAGINALIS.—Mr. T., age 54, received a kick from a horse fifteen years ago, there resulting a slight contusion of the scrotum and left testicle. Some swelling followed, which continued for two years and disappeared. Soon, however, the scrotum began enlarg-

ing again, and in a few years there was a tumor of such size and weight as to prove a source of great inconvenience. About this time he consulted a surgeon, who told him there was malignant disease of the testicle, and that nothing save castration would relieve him. The proportions of the remedy were greater than he felt willing to submit to, and as a consequence, did nothing for a few years more. The tumor in the meanwhile had been growing, and when I saw him in February, 1871, it was evident from his failing health that definite action in the case could be no longer delayed.

On the 11th of February, Dr. West, his family physician, and myself, visited him, for the purpose of determining, if possible, the nature of the trouble, and deciding upon a plan of treatment. Mr. T. is a man of large frame, being six feet two inches high, and weighing, when in health, two hundred and twenty-five pounds.

We found the tumor twelve and one-half inches in length, and at the largest part, which was a little above the middle, twenty-four inches in circumference. The skin over a small portion of the anterior and upper surface was smooth and elastic, elsewhere it was slightly wrinkled. The general surface of the swelling was irregular, being in some places distinctly nodular, and to the touch gave a sensation of solidity, save over the portion having the tense, smooth skin, which gave the slightest sensation of fluctuation. A careful examination in a darkened room showed no translucency. The penis was entirely submerged, its investing skin being drawn into the scrotum.

Dr. Patten, of Princeton, saw the case with us the following day. An exploring trocar was introduced, and this revealing the presence of fluid, a large flat trocar and canula were pushed into the tumor at its middle and anterior surface. Two quarts and eight ounces of dark brown fluid were drawn off. In passing the trocar, it was discovered that the vaginal tunic was cartilagin-

ous and much thickened. So great was this thickening, the walls could not be sufficiently compressed to completely evacuate the fluid, and we were satisfied a considerable quantity remained after our manipulations.

The second day from the tapping, the sack began filling again, and on the fourth, was apparently as large as ever. Introduced the trocar and canula again, fully expecting to find as large a quantity of fluid as on the previous occasion; it measured, however, but 30 ounces, was tolerably clear, and on standing a few moments was filled with flakes of lymph. This we accepted as evidence of an acute inflammation of the serous lining, and gave him for a few days such antiphlogistic treatment as we thought necessary to modify the inflammatory action. After a certain reduction in size had taken place, and all the febrile symptoms had subsided, the tumor became stationary.

Thinking it depended upon fluid, the trocar was again introduced. and notwithstanding the canula was pushed to its shoulder, not one drop of fluid came away. It was apparent from this that the fluid had been wholly absorbed, and that only the dense fascia and thickened sack were to be disposed of by a process of absorption. The measurements at this time were: length nine inches, circumference seventeen and one-half inches. Emollient applications were made, and the enlarged veins of the scrotum opened every morning for several days in succession. As soon as it was found the tumor was softening, it was bound up by means of strips of heavy mole-skin plaster, so as to compress it equally at every point. Happily the absorbents began their work again, and in six months from the first tapping the cure was in every way complete.

A few points in the case suggested this report:

1. The quantity of fluid as being much beyond the average for this climate, and the size of the tumor as being altogether out of proportion to its contents.

2. The cure as having followed only palliative treatment, contrary to what might have been expected in a case of such long standing and having such marked structural changes.

3. The difficulties involved in diagnosis. There was a departure in several essential ways from ordinary hydrocele. Instead of a tumor that was smooth, elastic, oval or pyriform, fluctuating and transparent, the skin, with the exception of a small surface, was rugous, the tumor to the touch had a sensation of solidity, was irregular or nodular, fluctuating indistinctly at one part only, and perfectly opaque.

In all cases of long standing in which there is thickening of the sack, this difficulty will be encountered. The point is to distinguish between hydrocele and malignant disease of the testicle, and nothing save an exploratory puncture by a delicate trocar or grooved needle, will decide as between them. Even if disease of the testicle exist, the wound of so delicate an instrument can do no harm. A surgeon well known in a large section of country as having distinguished ability, pronounced this case encephaloid of the testicle. Curling, in his work on Diseases of the Testes, relates a case occurring in his practice that he was unable to decide, until his patient having died of disease of the chest, a post mortem examination revealed an old hydrocele with cartilaginous thickening of the tunic. He also relates a case, having undergone the same textural changes, occurring with Dupuytren. It had all the features of schirrous disease, was unaccompanied with any sign indicative of hydrocele, and this distinguished surgeon was only able to decide after having made an exploring puncture.—*S. M. Munford M. D., Transactions of the Indiana State Medical Society.*

SIMULTANEOUS OCCURRENCE OF TWO ACUTE EXANTHEMATA.—Herschman reports five cases of variola scarlatina appeared after variola; in fact, on the seventh,

twelfth, thirteenth, fifteenth, and sixteenth days. All five cases occurred in the space between the 10th and 15th of November, in the small-pox ward of the St. Joseph's Child's Hospital. In all the cases both the eruptions were well marked and accompanied by equally characteristic concomitant symptoms. The outbreak of the scarlatina was in each case preceded by a marked raising of the temperature. Anchenthaler reports a case of simultaneous morbilli and variola in the same individual. The author rests the diagnosis of the morbilli (as that of the variola admitted of no doubt whatever) upon the characteristic prodromal phenomena of measles, upon the appearance of the patient, the nature of the eruption, the spread and subsidence of the exanthem by desquamation, upon the extent of the curves of temperature, which attained a maximum point at the florition stage of the first eruption, and a second during the development of the variola.—*Jahrb. f. Kinderkr.*

ANTAGONISM BETWEEN THE ACTION OF ATROPIA AND CALABAR BEAN.—During the last few years there has been much controversy respecting the power of certain drugs to act as antidotes to atropia poisoning. At present it seems upon chemical evidence, that morphia or opium has this power.

It is now claimed that physostigmia acts far more certainly as an antidote to atropia poisoning. On account of its intrinsic importance we call the attention of our readers to some recent experiments on this subject. We quote from the *Boston Medical and Surgical Journal* for September. The experiments were originally published in the transactions of the Royal Society of Edinburgh. They were performed by Thomas B. Fraser, M. D., and are models of exactness in this line of research.

Respecting the mode by which atropia counteracts the lethal action of physostigmia, the author says: "I see no evidence for thinking that this counteraction is due to either some chemical reaction between atropia and

physostigmia, or to an increased rapidity in the elimination of one substance produced by the other. The conditions of the experiments, and the symptoms observed, render it certain that atropia prevents the fatal effect of a lethal dose of physostigmia by so influencing the functions of certain structures, as to prevent such manifestations from being produced in them by physostigmia as would result in death. The one substance counteracts the action of the other, and the result is a physiological antagonism so remarkable and decided, that the fatal effect of even three and a half times the minimum lethal dose of physostigmia may be prevented by atropia." It was shown that this antagonism only holds for certain doses. Large doses of atropia can not be antagonized by the physostigmia.

ARSENIC IN RED PAPER HANGINGS.—Dr. N. Hallwachs has discovered arsenic in considerable quantities, in gray and red paper hangings, so that not only green papers but those of other colors must be looked upon with suspicion.

INK SPOTS may be removed from colored fabrics by a concentration solution of sodium pyrophosphate, which dissolves the ink slowly without affecting the color of the fabric.—*American Journal of Pharmacy*.

TESTS FOR NITRIC ACID.—About a cubic centimetre of pure concentrated sulphuric acid is placed in a watch-glass; half a cubic centimetre of sulphate of aniline (formed by adding 10 drops of commercial aniline to 50 c. c. of SO_3 , in the proportion of 1 to 6) is poured on drop by drop; a glass tube is moistened with the liquid to be tested, and moved circularly in the watch-glass. By blowing on the mixture during the gentle agitation, when a trace of nitric acid is present, circular striæ are developed of a very intense red color, tinting the liquid rose. With more than a trace of nitric acid, the color becomes carmine, passing to a brownish red. The test is surpassingly delicate.—*Year-Book of Pharmacy*.

ANTIDOTES IN ACUTE POISONING BY PHOSPHORUS.—Professor Bamberger has recently reviewed the subject of antidotes to phosphorus poisoning in an article in the *Wiener Med. Presse*. The oil of turpentine has hitherto been regarded as the most reliable antidote in our possession. It has been shown by Vetter that this antidotal power belongs only to the impure acid oil, which is converted, in contact with the phosphorus, into a spermaceti-like crystalline mass. In the experiments of Vetter, Kohler and others, from twenty to forty per cent. of the animals to which this antidote was administered, following poisonous doses of phosphorus, died. Professor Bamberger suggests, as a more reliable antidote, the soluble salts of copper. When a piece of phosphorus is introduced into a solution containing copper, it becomes almost instantly coated over with a black layer of phosphuret of copper, and, in a little while, above this with a layer of the red oxide of copper. In this condition phosphorus does not volatilize at all, as it emits no odor and does not shine in the dark.

Experimenting upon rabbits, Professor Bamberger found that "small doses of phosphorus, combated by turpentine, rapidly killed the animals, whilst, when the solution of copper was used, death only followed after the expiration of twice the length of time required by the first method, and after twice the dose of the poison." Professor Bamberger has had no opportunity to use this antidote, but Gerhardt and Vetter have employed it successfully.

COD LIVER OIL is flavored by Duquesnel with one per cent. of oil of eucalyptus, which covers the odor and taste completely, and even modifies decidedly the unpleasant eructation that follow its administration.

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PYÆMIA, THROMBOSIS, EMBOLIA.

BY R. E. HAUGHTON, M. D., RICHMOND, IND.

A condition of disease, in more recent times, known to be the result of the introduction of animal products, into the circulation which may be foreign or generated within the economy by some inflammation. It first attracted attention, in connection with phlebitis or inflammation of the veins. Desault described it as a disturbance of the nervous system; others have regarded it as belonging to the lymphatic system, and others again as dependent upon atmospheric causes. There are two conditions produced, the one being dependent upon the other. The first is a systemic infection, being the primary, or direct consequence of a poison, in which the fluids of the body are chiefly concerned; the second a series of results secondary to the primary disease, or it may be dependent upon other and more remote causes. A poison introduced into the system, is the cause of the primary disease by the "systemic infection." To determine in all cases the

nature and mode of action of such poison, so far has never been done, no more than has been determined the poison of other diseases, which are produced and propagated by inoculation. Often have we believed, that in some obscure manner, we find conditions growing out of some vitiated condition of the blood, yet we can not fix upon, or determine, what those changes are. We believe that certain noxious agents may find entrance to the system, through absorption from the lungs or alimentary canal, but these causes if they do exist are so difficult, if not impossible to determine, that for the present we confine what we have to say upon this question, to that class of cases which are more tangible, those in which the disease has its genesis, in diseased or injured parts, as in an inflammation produced by an injury done to a vein, or in an ulceration, which is exposed to the atmosphere, and it may be dressed with all forms of animal and putrid dressings. It matters but little in any sense how these poisons are derived, whether from the decomposition of pus or other fluids, as secretions, or from any source from which a poison may be taken. When the poison has found entry, by any route into the system it is rapidly diffused, by the veins and lymphatics and glands, and in a few hours there are produced, rigors, vertigo, and a general depression. Then a reaction, followed or attended by heat, perspiration and rapidity of pulse. If there is a point of inoculation, it is inflamed, hard, and if a healthy suppuration had existed, the discharge ceases, swelling extends to other and adjacent structures, with unhealthy serious effusions mingled with a sanious discharge, a mixture of blood and pus. The systemic circulation has become impressed, the heart is acting violently, and circulating rapidly the blood which has thus been affected, thus producing a general contamination of fluids and solids, which result in various local manifestations, exudations, effusions, forming spots resembling ecchymoses upon the surface of

the body, or if internal, the same fluids are removed by vomiting and purging. A few hours later, the prostration is so great that the patient, restless, anxious or delirious and exhausted is in a hopeless condition, and dies. This is a rapid termination, and cases are less acute than this, where the progress is slow, insidious, and often somewhat protracted. When this is the case the disease closely resembles typhoid fever and is often recognized as a systemic infection, after surgical operations, surgical fever, with symptoms which are of a typhoid character. As we have already said the blood has become so altered that exudation occurs, diffusing the coloring matter into the tissues, which remain because the rapid progress of the disease leaves no time for absorption or changes. Again, in more chronic cases, metastatic abscesses are produced, suppurations occur, as in some of the more severe marked blood diseases, as scarlatina, typhoid fever, small-pox, etc. But these conditions prove that inflammation, or some product of inflammation has found entry in the circulation. But while this condition was admitted, yet as connected with these conditions, the whole doctrine and theory of phlebotic-thrombus, was clearly misunderstood. In the time of John Hunter, when pus was supposed to be found in a vein, it was supposed to be absorbed in through an opening on its wall or extremity, this then accounted for pyæmia. Pus was considered the poisonous matter, and was produced by the secretion from the inflamed vessel-wall. But another difficulty arose, as soon as it was admitted, that a primary purulent inflammation of veins did not occur, but that, as was shown by Cruveilhier, in the condition of vessels, which are known to be inflamed, a clot of blood is always present, which remains so far to be true. But when we recur to the question of pyæmia, and ask what is now understood by it, what is now the answer? Formerly, it was conceived to be a condition in which the blood contains pus, that is, pus

corpuscles are seen in the blood. Since, however, the microscope has been brought into requisition, in the investigation of the obscure and hidden things of the complex structure and workings of the human body. Conheim has demonstrated that colorless cells of the blood are so much like pus corpuscles, or *vice versa*, that it is almost impossible to determine one from the other. There are but few colorless corpuscles in the blood of a healthy person, about one in three hundred. This question continues to occupy the attention of medical observers as to the relation or resemblance between the pus corpuscle and the white blood corpuscle. While I do not propose to enter into the description of either, as to form, size or appearance, it is sufficient to say that this view or discovery of Conheim's has changed the current of opinions, as to the conditions which belong to the subjects of my paper.

Hence, formerly starting with the idea that white corpuscles were pus corpuscles, it was easy to found upon such a view the doctrine of pyæmia. To such a view no objection could be urged so long as we did not know that these corpuscles were not pus corpuscles, and thus proof of such doctrine was as apparent and plausible. Spontaneous pyæmia was thus supposed to be a condition of blood in which pus corpuscles were found in it, and Perry and Bennett went so far as to suppose that the blood like any other tissue was subject to "suppuration." These reflections raise the inquiry by what process do the white corpuscles become so largely increased as to resemble a suppuration of the blood, as is found in Leukemia or Leucocytosis, which means a condition where in the blood there are variable conditions of fibrin, but most of all a largely augmented increase of the colorless corpuscles of the blood, so that the proportion of white and red corpuscles is very greatly changed, so much that in place of one in three

hundred the white ones are increased to the proportion of one to three. The cause of such rapid increase is found in the condition of the glandular organs, which are the blood manufacturers, namely, the spleen and lymphatic glands. Any source of irritation, cause of disease by which these organs are affected, increase the white corpuscles and diminish the red ones, and many or all of you can bring to your minds conditions in which these conditions have existed. Then these conditions are not pyæmia; hence, we must find some other conditions than these upon which to found the condition called pyæmia. As before remarked, the condition called pyæmia does not necessarily arise from pus in the blood, as it has been proven that healthy pus may be injected into the veins without any ulterior result upon the health, perfectly innocuous, while pus which may have changed or become septic or poisonous might prove extremely dangerous. Again, the assertion that pus was introduced into the system through absorption, and thus pyæmic inflection occurred, has been disproved in two directions. First, as before stated, healthy pus in the circulation is innocuous, and again, if absorbed as pus, no difficulty would occur. Secondly, pus is not absorbed as pus, yet pus is removed from its depots of deposit by changes effected upon through the absorption of its more fluid elements, and the remaining elements are dissolved and removed; hence, while pus is absorbed not as pus, yet removed, no pyæmia occurs. Animal poisons, absorbed, taken into the circulation, producing systemic infection and inducing a condition of the blood which is an entire modification of its normal elements or constituents, including elements left in the blood which should have been removed by excretion, and thus we have a chain of accumulating causes which are productive of pyæmia, as we find in some of the low forms of fever, as puerperal and surgical fever. Again, in connection with wounds of vessels in which we have inflamma-

tion, with obstruction of the vessels, leading to suppuration and under unfavorable circumstances the very conditions above described, a surgical fever in which the blood either receives elements which are deleterious or being unable to get rid of the noxious elements by the normal process of secretion or excretion, the blood is poisoned. Pyæmia is a fact. This condition leads us to the next subject, in connection with injury done to vessels or inflammation produced, by which the condition of "Thrombosis" is induced, a plugging of vessels by the coagulation of their fluid contents. When this condition has occurred, the most important consideration is how this thrombus is removed, and what is its relation to the vessel, and by what process is its removal effected. There are two possible changes for its removal. The more common one is the organization of the coagulated blood into connective tissue, with complete obliteration of the vein instanced in phlebites crurale. I had occasion a few months ago to see such a case of 30 years duration, which almost entirely crippled the patient from a want of proper management, but now restored to reasonable use and activity, yet not by any change in the affected vessels. The second change which may rarely occur is a disintegration of the clot of which the thrombus is composed. This change begins in the interior of the fibrin in the clot, softens or breaks down into a brownish, pulpy substance, while the disintegration continues and spreads more and more, and the thrombus is converted into pus, which mingles with the already broken down fibrin, which is a pure form of fluid, and not the result of the suppuration formed in the wound, but in the vein form, the blood clot or "thrombus." While this change is being effected in the clot, the walls of the vein are thickened, the cellular tissue now called connective tissue becomes thickened, and we have sometimes small abscess in the walls of the vein. In this case the inflammation of the wall of the vein is to be regarded

as the result of the softening of the thrombus. If there be an open or suppurating wound in such case, the pus from such wound does not find entrance into the vessel, as it is closed up to the time of the suppuration of the clot which had acted as a thrombus. Hence, no pus has found its way into the circulation, as the internal or central end of the thrombus prevents its mingling with the blood. So far at least this is true, unless the central end of the thrombus should be entirely broken up by the disintegration or softening, and this is not likely to occur, from the fact that inflammation of the coats of the vessel as alluded to, would produce fresh deposits of fibrin which would still act as a safeguard to pus or other detritus entering the blood. Thus the circulation is efficiently guarded from the condition of systemic infection, so far as the morbid processes in themselves are considered, yet may not be able to protect against the septic influences produced upon the blood by blood contamination within itself through the failure of those natural processes, which would keep the blood purged of its effete products, the result of disease which produces rapid tissue changes. Virchow, I believe, does not admit the possible termination of the thrombus by pus formation, while Bilioth and others assert it. And there is certainly no objection to the acceptance of this view, because if the blood cells in the thrombus have the power of passing through the advancing metamorphosis, there is no reason, when the reverse conditions obtain in the system, that they should not pass through the retrograde metamorphosis also. As white blood cells found outside of the vessels are to be taken as pus cells, so, when they are found within the vessels, they are to be regarded as normal blood corpuscles, as it is now confidently asserted that there is no distinguishable difference, and upon this ground Virchow has affirmed that if you know from whence these corpuscles come, you can decide what they are, whether pus corpuscles or blood corpuscles. That

the thrombus may change to true pus, by division of the white blood cells, does not appear to be disproved, and that the pus thus formed from thrombus does not enter the circulation rarely, if ever, and, therefore, can have no connection with pyæmia. Thrombi of veins are generally the result of acute inflammation of the veins, or connective tissue, and the clot which is formed under such influences passes through the same changes as the inflammatory deposit or new formation. If the lymph produced becomes organized, if the inflammatory lymph passes to suppuration or putrefaction, the thrombi does the same thing. This is the more readily understood, when we remember that tissue cells may pass through the walls of the vein into the vessel, and, also it is true of the white blood corpuscle that they too are migratory, and are found passing through the walls of the vein, and among the tissues; hence, the doctrine of Virchow, that when this is the fact, they are to be regarded as pus corpuscles. While it is barely possible to have a true pyæmic infection from the formation of a thrombus through the softening which may occur, yet there is another difficulty which is certainly far more dangerous and more likely to occur, namely, the quite frequent process which Virchow denominates embolia. This condition is found in this. That as the vessel, it may be an artery or a vein, which has been more or less completely obstructed, that as the circulation or current of blood passes one of these plugs, which, having formed in a vessel, and obstructing it continuously up to the next branch, and projecting into it, portions of this plug or embolus is detached and carried along into other vessels till some too small vessel arrests the progress of the portion thus detached, and thus it may be in some vital organ, as in the lungs, by obstruction of a branch of the pulmonary artery, or in the brain, liver, kidneys, the same process may occur, producing serious embarrassment and mischief in the circulation of such organ, and

as I have known in one case, at least, an obstruction of a pulmonary artery producing sudden death. We should notice in this history that the arrest of the detached portion of an embolus is always at some point in the course of the vessel at its bifurcation, whence the size of the vessel will not allow further progress. This forms an obstruction to the proper or perhaps complete circulation supplied by this vessel, and as blood slowly enters the vessel by small collateral branches, and, finally, the whole territory of vessels dependent upon the arterial branch, is obstructed, thrombosis is generally the result of an embolus of an artery. Sudden death may occur, from such a condition or rupture of vessels, hemorrhages in any organ, with the consequent results of such a condition upon the function of the organ. "In pathological anatomy, these conditions, due to embolism, are called hemorrhagic cone, like infarctions."—(Billroth.)

This condition now described is not always a necessary result of embolism, as we may have no great disturbance of the circulation and the power of the heart is able to carry or drive the blood through the capillaries, together with its adjuncts of force; hence, no hemorrhage, but a temporary obstruction, which we are to regard only as a simple obstruction of an artery, and consider the means by which it is to be remedied. The local processes depend on the character of the embolus, if it be composed of pure fibrin; there may be thickening of the coats of the vessel about the obstruction, which involves smaller branches, which latter may have had during the period of obstruction, new coagula deposited around the original plug, and finally become organized into connective tissue, or be absorbed. If the embolus is in part composed of fibrin and mingled with pus or septic matters, suppurative or putrefactive changes occur in the walls of the vessel, and in the surrounding connective tissue which may finally lead to blood poisoning and pyæmia. If this condition should

occur with suppurative inflammation, then you are likely to get abscesses at the point of inflammation, but owing to this condition by which the blood, so to speak, becomes putrescent or poisoned, and carrying these elements to distant portions of the body, or perhaps causing the coagulation of blood at distant points, producing what has been called metastatic abscess. The embolic origin of such abscesses is now so well established, so undoubted, that if we find one in a locality creating the suspicion, we can confidently decide upon a venous thrombus passing through the stages of retrogressive-metamorphosis, ending in putrid or suppurative, liquefaction. The relation between venous thrombi and abscess of the lung is often an undoubted existence, yet is very difficult to determine, and it is so much less to be able to demonstrate it. We often see hemorrhagic lung infarctions, and we have often felt ourselves quite unable exactly to determine just what condition had been the primary cause, yet it is true that embolia of a pulmonary vessel will produce pulmonary hemorrhage, with its consequences of obstruction, and, finally, abscesses of the lungs. I have had occasion to see instances of abscess of the lung which was by no means tubercular in history, but was inflammatory and preceded by hemorrhage, by great dyspnoea, with slow but final and gradual recovery. Such is the fact also, much more rarely in the liver, spleen, kidneys and muscles, as these are declared to be always dependent upon emboli. The proof of these statements is found in the experimental reseaches of O. Weber, that certain forms of emboli, as flocculi of pus, pass the pulmonary capillaries without difficulty, may enter the left heart, and thence pass into the systemic circulation, and finally be arrested in some of the more remote, and yet vital organs, producing great embarrassment of the circulation within the organ, and finally leading to abscesses; hence, called metastatic. This view, therefore, explains those rare cases where with

venous thrombus there are abscesses in the lungs, while they are found in other organs. If then with abscesses in the lungs there are embolic infractions or abscesses in parts supplied by the systemic circulation, these may be attributed to the formation of venous thrombi through the pulmonary abscess, as portions of these thrombi pass in the left heart, and into more remote parts of the circulation. It has been observed by Busch that retrograde movements of the blood from the right heart may take place in the vena cava, hepatic emboli may occur. Much difficulty of diagnosis occurs in certain cases as to the origin and connections which occur, as in phlegmonous inflammation, and also in many cases of internal inflammations. In the brain that the cerebral capillaries become obstructed, by emboli, has been clearly demonstrated; hence, those cases of softening and abscess of the brain, stand upon a clearer horoscope than ever before, and so also in other cases in which abscesses occur, without observable cause, except it may be that some suppurative inflammation has been the original cause of difficulty, yet it is often difficult if not impossible to demonstrate anatomically the fact. We have observed these conditions in the last stages of low fevers, in which local suppurative action or abscesses were formed in various parts of the body as we suppose from the same history. We have now briefly, and too briefly presented this subject, and we do not enter into any discussion of treatment in such cases, as general principles must govern largely, as we have to do with local inflammations and results. One thing is suggested, that in the management of cases which come into our hands, if death occur either suddenly or more remotely, we should endeavor to secure post mortem examinations, so as to reveal the pathological anatomy, and thus secure the materials for a broad and substantial, and enduring basis upon which our science and art rests; also, to secure to ourselves that practical proficiency in the knowledge of disease, which can alone make us able ministers at the

bed side of the sick and suffering. To this end let us each one devote more time and study to those questions which are and have been more obscure, and in which our pathway was not illuminated by the clear sunlight of necessary and positive knowledge.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, OF INDIANAPOLIS.

ECZEMA AURIUM.—During the process of dentition, we find eczema of the auricle in quite a number of cases, either developing in this structure primarily by extension from the surrounding parts, or in conjunction with eczema affecting the whole of the head and face. Indeed we find it not only during dentition, but in case of debility arising from whatever cause in those children who, from their appearance, are properly supposed to be of scrofulous diathesis. A case may serve to illustrate the symptoms, and treatment of the complaint.

A child, aet. 14 months, of German parentage, well formed and healthy, with fair hair, blue irides, was brought to me on account of eczema affecting the auricle. The left auricle was swollen and prominent; its normal elevations and depressions indistinct and not discernible in certain parts. A yellowish and bloody scab covered the greater portion of the auricle, removal of the crust showing the parts beneath red, swollen and bleeding when touched. Behind the auricle where it was attached to the head was a raw, wet fissure, secreting an offensive watery discharge, the odor of which was nearly intolerable. Separation of the sides of this fissure by drawing the auricle forwards was attended with pain. The hair in the vicinity of the ear was mat-

ted together by the secretion. On the cheek and side of the neck were separate resicles, which, on bursting, gave rise to the peculiar yellowish scabs, some being tinged with blood. The coucha and outer portion of meatus were swollen and contained a reddish, watery fluid, and some hardened crusts. The meaters, after washing out a lot of flakes of epidemics presented a sodden appearance, as after poulticing, membrana tympani not to be discerned.

The affection had come on with the beginning of teething and had been more or less severe ever since—sometimes better, sometimes worse than at present.

The little patient would frequently pick and rub the affected part, loosening the crusts and causing bleeding.

Owing to the irritation of swollen gums, he was sometimes quite peevish and fretful, and would then, more than at any other time, scratch and pull at his ear, but during the greater portion of the time he was apparently free from pain and was cheerful and playful.

The right auricle was sore only behind where it was joined to the head, and was painful only when the sides of the fissure were separated, thus exposing it to the air and breaking the adhesions which had partially formed.

The child being in good health, strong and active, no constitutional treatment being indicated further than allaying the pain induced by the condition of the gums, and the itching of the excoriated parts, I ordered the following:

R Potassii Bromide,	- - - - -	grs. xxxii.
Syrup Simple,	- - - - -	f ʒii.
Ol. Anise Sem,	- - - - -	gtt. iii.

Mix.

A teaspoonful occasionally for restlessness; and the following to be applied on cotton-wool to the ear:

R Ol. Jecoris Aselli,	- - - - -	f ʒii.
Acid Tannic,	- - - - -	ʒi.

Mix.

To be applied twice, daily.

The cod-liver oil is the best greasy application I have yet found for the purpose of softening and removing, or preventing the formation of the crusts in this disease, and I can recommend it as a remedy that I have fully tried and have seldom found wanting in effecting a cure.

Various washes and lotions and ointments have been recommended as external applications, and Woltseh says: "It seems to be a matter of indifference as to what kind of oil or salve is used," and especially in the chronic and the impetiginous forms, yet I have met with better success in the use of cod-liver oil, either alone or with an astringent, than with any other application.

If with these external applications we employ sedatives (such as the bromide of potassium) internally, a speedy cure is almost certain in impetiginous (the form I have usually observed accompanying dentition) eczema aurium.

Wilson (Diseases of Skin, p. 202) lays down these three rules to guide us in treating eczema aurium:

1. Eliminate, cathartics, etc.
2. Restore power, tonics, arsenic, etc.
3. Alleviate local symptoms.

Now these rules may be useful in combatting some forms of eczema, but in cases occurring during teething, which we are more particularly considering now, the plan before indicated will generally prove successful, as it did promptly in the case related.

Proceedings of Societies.

NORTHEASTERN INDIANA MEDICAL SOCIETY.

The meeting was held at Ligonier, in the office of Dr. Knepper, Tuesday, December 3, 1872, Dr. Dancer presiding.

Members present—Drs. Cowan, Spooner, Casebeer, Chamberlain, Wood, Dancer, Denny, Palmiter, Knepper, Crum, Landon, Gants, Roehdebaugh, Franks, Carr, Latta, Erickson and Gilbert.

After some preliminary business, Dr. Franks reported the following case: Patient aged 20—male, in good health, with the exception of an attack of epilepsy, which recurs about once a year. As yet it has resulted in no visible constitutional disturbance. During a violent attack, on the 29th day of last August, he fell from a chair. After the attack he complained of considerable pain in the left shoulder. A physician was called, who examined the shoulder, but found no displacement. He prescribed liniment, and gave other directions. About four weeks afterwards, the patient applied to Dr. Franks, who found a downward dislocation of the humerus. The patient was brought under the influence of chloroform, and the luxation reduced, with the aid of Dr. Gant. It was the opinion of Dr. Gant, (who was called immediately after the attack), that the luxation was the result of continuous muscular action, and not the result of violent muscular action during the attack, or from the fall. This opinion was not fully concurred in by the society. Dr. Denny, however, believed a luxation might be possible from continuous muscular action, although in this case it probably occurred during the attack.

Dr. Cowan reported a case of periodical epistaxis in a child aged eight years—healthy parentage. The patient was put on iron and the mineral acids, besides periodic doses of quinia, nutritious diet, bathing, etc. This treatment was continued for some time, with no improvement. At length an eruption on the skin occurred, with coppery discoloration. The doctor believing it to be of a syphilitic character, prescribed "Donovan's Solution," which resulted in a speedy recovery.

Dr. Langdon presented a case—female, aged fifteen—cancerous cachexy. The patient has a vascular tumor

under the tongue, near the orifice of Wharton's duct, and one on the cheek, near the opening of Steno's duct, which has a hard consistency, but not of the nature of concretions from the saliva. The neck, externally, presents a few varicose veins.

Dr. Latta—The tumor under the tongue is varicose, of course, but owing to its location I would consider its removal very dangerous, on account of the hemorrhage which would prove uncontrollable. If I were to operate at all, I should destroy the vessel by injecting it with sol. ferri persulphas. I would use as large a quantity of the solution as possible, as I believe there is less danger from clot when the inflammation produced is considerable, than when it is but slight, for obvious reasons.

Dr. Erickson—I should use the "Vienna paste" in destroying vascular tumors. The danger from clot is very slight, indeed, with the paste. I have frequently used it in destroying tumors of this kind, and have never experienced bad results. I should consider an operation extremely hazardous in this case, however, on account of its location.

Dr. Denny—I believe it to be cancerous, and would advise no interference.

Dr. Erickson presented a calculous, measuring two inches in circumference, which he removed from the urethra of a gentleman three days before. It had passed from the bladder and lodged in the urethra about an inch below the prostate gland. It was impossible to remove it except by the knife. The patient bids fair to make a good recovery.

A chemical analysis shows the calculous to consist of oxalate of lime.

Dr. Crum reported a case—girl, aged two years. In falling upon the sharp corner of a cellar door, the walls of the abdomen were broken through and the colon was ruptured, the bowel protruding through the aperture. The wound was dressed with the assistance of

Dr. Knepper. The patient was put on opium, and complete quiet was observed. A good recovery was the result.

Dr. Latta spoke of the importance of full doses of opium in such cases, and of the necessity of avoiding cathartics. He would rather allow the bowels to remain constipated for a month than give a cathartic in such a case.

Dr. Chamberlain reported a similar case, which also resulted in recovery. A woman, in attempting to commit suicide, had opened the abdomen with a knife, near the umbilicus, and withdrawn the colon, had cut away about four inches of it. The ends were returned and the wound dressed. The doctor gave a full dose of opium and left the patient to die, as he supposed; but to his astonishment she recovered.

Dr. H. D. Wood reported the following case: Male, aged 35—parentage good. Entered the army in good health in 1861, and served until 1865. During the summer of 1864 he suffered much from diarrhœa. In the winter of 1864-5 he began to complain of pain in the ball of the left foot when walking. The pain extended to the heel, and thence all over the foot. In 1866 the other foot was involved in the same way. On rising in the morning he suffers no pain, but walking produces pain and a sense of tension. When the feet are elevated there is no pain. At first there was but little swelling, but it gradually increased a little. There is some redness now, and slight pitting on pressure. The affection has been growing more painful from year to year, until the present time. He first came under the doctor's treatment a year ago. He has been unable to afford any relief whatever. He now submitted the case to the society, and asked for an expression of opinion in regard to its pathology. There was an extended discussion on this case, but nothing satisfactory was elicited.

A number of other cases of much interest were re-

ported, and an animated discussion was had on uterine supporters.

T. F. Wood, G. Erickson and P. W. Crum were appointed essayists for the next meeting.

The subject of discussion at the next meeting will be :
"Can legislation be protective to the medical profession."

JOHN DANCER, Pres.

J. L. GILBERT, Sec'y.

UNION DISTRICT MEDICAL SOCIETY.

The Union District Medical Society met at the Court-room at 10 o'clock, A. M., pursuant to adjournment, President J. E. Morris, of Liberty, Indiana, in the chair. The Secretary, Dr. Haughton, read the minutes of last meeting, which were approved. Dr. W. Hobbs, of Carthage, Indiana, was appointed Assistant Secretary and Reporter. The President announced the following committees, viz :

On Business—Dr. Sexton and Dr. Sipes, of Rush county, and Dr. Boyd, of Wayne.

On Admissions—Dr. J. W. Green, of Rush county ; Dr. Talconer, of Butler county, Ohio, and Dr. Hazzard.

On Elections—Dr. Moffitt, of Rush county ; Dr. Pennington, of Wayne county ; Dr. Koogler, of Fayette.

The Committee on Admissions recommended the following gentlemen for membership, viz : Drs. Bradbury, Pennington and Sweney, from Wayne county ; Drs. Ewing, Spurrier, Manzey, Neil and Inlow, of Rush county ; Drs. Cochran and Bailey, of Henry county, and Ely and Kircoff, of Shelby, were invited to sit as corresponding members.

The Committee on Business reported an order of exercises for the day.

Dr. Hobbs called the attention of the Society to some

charges against him published in the August number of the *INDIANA JOURNAL OF MEDICINE*, by Dr. J. A. Comingor, of Indianapolis. He had invited Dr. Comingor to present these charges here, and had demanded a trial upon them. The demand had not been accepted, and he now desires the Society before whom the offences were alleged to have been committed to receive and prosecute the charges. The subject was referred to a committee consisting of Dr. Falconer, of Hamilton, Dr. Boyd, of Dublin, and Dr. Bradbury, of Cambridge City, to fully investigate and report thereon at their earliest convenience.

Dr. R. L. Haughton, of Richmond, Indiana, then proceeded to deliver a paper upon "The Physiology and Pathology of the Nervous System," which was written in his usual elegant style.

After the discussion by Drs. Moffitt and Falconer, who approved the views of the essayist and repeated cases confirming them.

Upon the motion of Dr. Falconer, Dr. Haughton was requested to offer his paper for publication in some one of our Medical Journals. As the profession will thus have an opportunity to study it, we shall here attempt no abridgment, but assure them the paper is worthy of their searching and careful notice.

Dr. Moffit, of Rushville, presented a written report of two cases of hemiplegia: One acute, aged 65 years, after a sudden shock which gradually deepened until about the 12th day when death occurred; the other chronic, aged 72 years, and several months' duration, which gradually deepened until death.

Dr. J. W. Green, of Burlington, Rush county, made a verbal report of case of skin grafting upon the person of a fireman who was scalded by steam in an accident upon the Indianapolis and Cincinnati Junction Railroad. The surface of more than half the body and upper extremities was scalded, involving also the right side of

the face and neck; very large ulcers formed upon the sub-axillary and sub-mammary regions of both sides. The grafts were cut from the leg of a brother of the patient and were deeply buried in the luxuriant granulations. The process was begun on the 21st day after the injury—about 70 grafts were inserted, probably 50 of which grew, and in ten days the surface of the sores were fully covered with skin. The injury was received on the 24th of December last. A few says since Dr. Green saw the patient—there was no contraction of the cicatrices, nor do they present the hard and condensed structures which usually follow burns and scalds.

Dr. Hobbs remarked that he assisted Dr. Green in his first dressing to this case, when from the extent of the surface involved the co-existence of fractures of the radius and ulna of the left side, the profoundness of the shock and the apparant want of constitutional force, there was little hope of a successful issue. His complete restoration to health and without deformity is alike creditable to the science of medicine, and to him who administered it. If it is true that skin grafting into the ulcers of burns will prevent the formation of dense contracting cicatrices and the deformities which they produce, it may be hailed as one of the great acquisitions of modern science.

Dr. Haughton was very thankful to Dr. Green for the suggestions which his case affords, and said that skin grafting is another evidence of the progress we are making in original research and discovery. Our brethren are not behind in industrious endeavor to learn, and there is no branch of science or knowledge which exceeds ours in progress.

Dr. W. Pugh, on behalf of Rush Medical Society, delivered a short and very neat address of welcome to the gentlemen from abroad, and invited all to partake of a free dinner which had been provided by the above named Society. On behalf of the visitors, Dr. Falconer

responded, when he took occasion to express a hope that good would result from our semi-annual meeting, not only in freshening and disseminating our knowledge, but in widening our professional intercourse, and uniting us into a closer brotherhood.

Then adjourned for dinner.

Upon re-assembling at 3 o'clock, p. m., the Committee on Elections reported the following nominations, viz :

For President—Dr. H. Saunders, Oxford, Ohio.

For Vice President—Dr. R. E. Haughton, Richmond, Indiana.

For Secretary—Dr. J. Chitwood, Connersville, Indiana.

For Treasurer—Dr. Wilson Hobbs, Carthage, Indiana.

The committee also recommended Connersville as the next place of meeting. Their report was concurred in and the election declared accordingly.

Dr. Joel Pennington, of Milton, Indiana, presented a written report in detail of a case of rupture of the uterus, and Dr. S. S. Boyd, of Dublin, who was associated with him in the management, made a verbal statement of the anatomical lesion and the mode of delivery. Without debate the subject of this case was returned to the reporters, for some additional facts which they had not clearly made out. A full account of the case will doubtless be published by the next meeting of the Society, but as it is one of the most, if not the most remarkable case on record of this terrible accident, in advance of the full statement we will give some notes of it.

July 29, 1872—4 A. M., Dr. Pennington was called to attend Mrs. B. in Q: Confinement—very feeble, uterine contractions at intervals of 15 minutes—patient stated that while over the chamber two hours before, she had “felt something give way,” and this was followed by a sharp stinging pain to the left and lower part of the abdomen—on arising she discovered blood passing from the vagina—did not know when her full term would be

completed. At 8 A. M., pains were stronger—os nearly out of reach, and but little dilated; warm, fluid blood passing. At 10 A. M., the os was sufficiently dilated to reach the presenting part; at 11:30 A. M., the os was fully dilated, the head presented in the first position, and was partially engaged in the upper strait. Here the Dr. ruptured the membranes and evacuated viii f $\frac{3}{4}$ of liquor amnii. At this stage of the labor she complained extremely of each pain, and persisted in declaring that she could not bear another such. At 12 M., she cried out violently and then became easy. Here her pains left her, and she continued to rest comfortably and converse with her friends and physician. About 4 P. M., Dr. Pennington made another examination by the touch. The vertex was found to have receded from the os, and to be less firmly fixed in the pelvis. He put his hand upon the abdomen and discovered the left foot, leg and knee of the babe only covered by the adominal wall. Mrs. B. then told the Dr. that at the last pain (four hours before) there was the sensation of a general movement of the child. During the following night the patient rested pretty well and slept some; pulse about 100, until 4 A. M., when it fell to 90. By a more careful examination in the morning, July 30, Dr. P. could easily trace the outline of the foot and leg of the child, and in the illiac fossa of the left side he could feel and grasp the placenta obviously lying without the uterine cavity.

Some time during the morning of the same day, and a little less than 24 hours after the cessation of the pains, Dr. Boyd, of Dublin, and Dr. Sweeney, of Milton, met Dr. Pennington with his case. Dr. Boyd introduced his right hand to turn, and found his thumb to pass into the *os uteri* which entirely inclosed it while his hand passed on to the left side of the os and *cervex*, until it reached the child. The rent in the uterus extended on its left side from the fundus to *cervex* within about one inch of the os, leaving the os undisturbed. Dr. Boyd secured

first one foot, then the other, and brought them down *outside* of the uterus, and to its left, and through this rent in the cul-desac and vagina wall the delivery was made. The head of the child would not pass until the arms had been brought down by a blunt hook. After the removal of the child the placenta was found floating about among the bowels.

The patient bore the operation well, though not without complaint—no anesthetic was used.

The patient continued under the joint care of Drs. Boyd, Pennington and Sweeney, and on August 3d Dr. Sexton, of Rushville, was called in. She continued to grow worse with frequent pulse, great prostration, almost complete paralysis of bladder; slight nausea, abdomen tympanitic and bowels constipated until August 5, when stercoraceous vomiting began, and a small quantity of fecal matter was discharged *per naturale*. This vomiting continued at intervals until August 8, when the crisis seems to have been passed, and the convalescence began. In just four weeks from the confinement the catamenia appeared, and an examination by Dr. Pennington since that time failed to discover any mal-position of the pelvic organs, or noticeable trace of the accident. This is but a brief synopsis of the case. It affords so many interesting matters for remark, that the reporter dare not trust his pen to embark at present in a review of it.

Last on the programme was the annual address of the retiring President, Dr. Morris. This was a very elegant and learned discourse on "The Origin and Development of Medicine as a Science." He made, in brief, the following points:

1. He dated its origin prior to the Old Testament Scriptures, tracing its development through the writings of Moses and the prophets.

2. Through heathen mythology and the times of Esculapius, Pythagoras, and their cotemporaries.

3. From the writings of Homer, and the authors of his day.

4. To Hippocrates, and the cultivation of medicine among the Grecians.

5. To its neglect by the Grecians and transfer to the Romans about 200 years before Christ.

6. Its downfall at Rome and revival among the Arabs.

7. The causes which led to its neglect in those three great nations.

8. Passed over a long and dark interval to the beginning of the 16th century, when there was a general revival of the study of medicine all over Europe, when anatomy, the true basis of the science, was introduced in its proper place, and the collateral sciences were drawn its contribution to its resources. Since then it has grown and strengthened in the progress of all the true sciences, and keeps abreast of all the knowledges.

This address well deserves the public eye. We know too little of the infancy and childhood of medicine. It is to be regretted that our Society has no proper means to give it a place in our literature.

Reviews.

A TEXT BOOK OF PATHOLOGICAL, HISTOLOGY; an introduction to the study of Pathological Anatomy, by Dr. Edward Rindfleisch. Translated from the second German edition, by William C. Kroman, M. D., assisted by K. T. Miles, M. D.; Philadelphia, Lindsay & Blackiston, 1872. Cathcart & Cleland, Indianapolis.

With Paget and Billroth we thought ourselves amply supplied, but after reading far enough into Dr. Rindfleisch's work to judge of its merits, we could not do without it, for while it may not cover more ground than other works which we know upon Pathology, still he presents

the various points in a different manner and language, much that was ably written upon by others, is made clearer by the contrasted views of the present author. When speaking of "new formations," infiltrations, fungi, vegetation, etc., he uses the following language:

"If I close this review with the remark, that all the kinds of forms mentioned are of a very transitory nature, and melt into each other everywhere at their limits, I do this especially because I do not wish to let any opportunity pass, to raze from the very foundation, the pre-histological error, as though by the description of the microscopic forms of a new formation anything had been said of its essential nature. This error was pardonable, because of course certain new formations prefer the one form to another, several indeed appear only as a fungus, as a polypus, as a papilla, etc.; this, however, does not exclude the fact that others may just as well arise in these forms. And what obtains from the external form, also obtains of the other microscopic properties, of the size, consistence, and color of the new formations, which were formerly with the same incorrectness valued as principles of divisions."

We have often thought that we lacked due perceptions, or for some reason could not comprehend the soundness of the arrangement and classification made by many writers, mostly in journal articles, who placed great stress upon the "minute anatomy" of "morbid" growth. According to this view, we had but to look at the microscopical form to determine the nature. Was the cell caudate? then malignant, according as the connective tissue was sparce and abundant, the growth solid or bathed in fluid, was its nature diagnoses. This was thought to be "Pathology made easy." So easy was it by a few manipulators to determine the exact nature of of a growth.

Experience, the great teacher, showed us the fallacy

of such reasoning, and that a growth may be malignant and yet "microscopally" resemble a benign one, etc.

Dr. Rindfleisch takes "normal growth as a type of the pathological," after noticing briefly the "Physiological formation and their connections, he says:

"If we now enter the province of pathological new formation, we first touch upon a series of abnormal conditions, which permit themselves to be characterized as simple excesses of the normal growth of organs. They are those partly uniform enlargements, partly one-sided projections or outgrowths, which, however, entirely agree in textural and structural relations with the parental soil, therefore only condition *quantitative deformity* of the affected organs. We will treat of the hyperplastic condition of the various organs in the corresponding chapters of the special part. The position which they occupy in the province of pathological new formation in general is sufficiently designated by what has been stated.

All new formations not hyperplastic contain in themselves a *qualitative* departure from the normal process of development and growth. It therefore appears difficult at the first view, to place them upon a physiological basis. There are, however, not so much actually existing as much more artificially produced difficulties, which stand in our way; above all, the transmitted custom of regarding the deviating evil, something foreign, introduced into the organism, of ascribing to it a pharasitic existence, even a kind of personality. This view, from which the term "heteroplasia" has arisen, has a certain justification; 1st, in the presence of those new formations, which are caused by a definite poison introduced into the body, and conformably present themselves in the most various organs in the same manner, thus in syphilis, tuberculosis, typhus abdominalis; 2d, in the sense that every organ has its own peculiar new formations, which always recur in the same forms with slight modifications, so that we, if they have progressed

up to a certain point, may thereupon base a sure diagnosis and prognosis. It is, however, unjustifiable and injurious to the progress of true science if one neglects, in the study and description of what the new formations of the various organs have in common, the right of the individual organs, which requires that one regards the pathological new formation as a disturbance of *its* development, its nutrition, or its decomposition. Be it well understood, I am very far from disputing the usefulness, nay, the necessity, of general observations of pathological new formations; these observations, however, ought to proceed more upon establishing the principle of development than upon finding out certain anatomical models, according to which a new formation, for example, cancer, is built, as well in this as in that organ. Moreover, if I understand our time, it is tired of the purely external, anatomical classifications, and decides with me, that this has become scandalous in the inexhaustible multiplicity of concrete forms. We will of course therefore speak in what follows of cancers and sarcomas; we will take pains to delineate the laws of the production and their growth in bold outlines, also not to exclude observations upon their effects upon the entire organism, therewith however constantly reflecting upon the description of the individual forms in the special part, and remaining conscious that the knowledge of these is at least just as important to the physician as is the general comprehension."

In accordance with this view he divides his work in to successive portions as indicated in such headings as the following:

1. "Pathological new formations which are exclusively the productions of the intermediary nutritive apparatus."

2. "Pathological New Formations, which are abnormal Productions of the Epithelial Growth, with, and

without Participation of the Vascular Connective Tissue System."

3. "Anomalies of the Blood, and the Places of its Formation, Especially the spleen and the Lymph-Glands, etc."

Pathology has often been placed as the foundation of medical science. We would rather place it in common with materia medica, obstetric, chemistry, etc., as a section of such science, composing part of the foundation, as well as that of the whole superstructure. Without it we would know but little, at least that would avail us practically, but to which we should give the place of honor we know not. Pathological anatomy, however, may truly be termed the bases of pathology. Too many we find overlook its basic character and while considering it view it as the whole of pathology. No doubt the distinction would always be *scientifically* admitted, but often *practically* ignored, there is a *cause* for all results revealed by the *anatomy*, and an ulterior result which, in many cases, are found to follow this mapped out morbid condition. There is much that mere structural change has not as yet accounted for. This should be remembered as well as its converse, that there is morbid manifestations where no structural change can be satisfactorily shown to exist.

"FREE parks and camping grounds, or sanitoriums for the sick and debilitated children of large cities during the summer months. By J. M. Toner, M. D., Washington, D. C. Infant mortality, by H. C. Hind, St. Paul, Minn."

"The two articles included in this pamphlet appeared first in the *Northwestern Medical and Surgical Journal*—they both have for their object the amelioration of the condition of infants in generally, and of the poor in particular. The first, Dr. Toner, catching at the idea of changing of residence so common among the better classes during the summer months, makes a very sensible suggestion of large

parks, where the poor can "camp," in fact, living there during the heated term. The idea is good, whether it will ever be practically carried out and made generally useful, we may doubt. The second considered more fully the want of ventilation and improper food as causes of infant mortality. Such thoughts are worthy of much attention, from not only medical, but the non-medical public.

One very simple device to assist ventilation is mentioned by Dr. Hand. We notice at home an air chamber in the stove with air brought from without through a tube, thus supplying a supply of heated but pure air. We see no reason why this suggestion should not be generally adopted.

TWENTY-FOURTH ANNUAL REPORT OF THE INDIANA HOSPITAL for the Insane, for the year ending October 31, 1872. Orpheus Everts, Superintendent; P. H. Jameson, President; J. H. Woodburn, J. M. Caldwell, Commissioners.

In the appendix we find the following:

"INSANE CRIMINALS—There are two classes of persons for whom frequent application for admission to insane hospitals are made who should not be so admitted, and yet require some provision for their care and custody.

"These are: persons accused or convicted of crime who are really insane, and persons temporarily insane from habitual intoxication.

"Insane persons accused or convicted of great crimes should never be imposed upon the wards of an ordinary hospital, for no matter what may have been the degree of irresponsibility under which criminal acts have been committed, the insane of our wards feel degraded by the association, and offended by the presence of such persons. Nor are they slow in finding out the character and history of every one with whom they have to associate. Prison wards, properly officered, should attach to our penal institutions, to which such persons, as well as all persons acquitted of capital offences on the plea of insanity, should be committed. If such provision

were made by law, fewer persons would escape from justice through the wards of an insane hospital or the much abused plea of insanity in criminal proceedings."

"INEBRIATES.—The State should regard every person who has not sufficient moral inclination or will power to refrain from habitual intoxication, as of unsound mind, and should assume guardianship of such persons under proper restrictions and limitations, with a view to—

First. The restoration of the citizen.

Second. The protection of society.

Third. The self sustenance of the individual.

With this end in view an asylum for inebriates should be founded, combining the features of a hospital with those of a manual labor school.

"An Inebriate Asylum should be deprived of all features having a punitive appearance. The law of commitment should be drawn with great care. The provision of such a foundation should be broad, generous and open in every particular, yet positive and certain in all features of administration."

MARKOE ON BONES—A TREATISE ON DISEASES OF THE Bones, by Thomas M. Markoe, M. D., Professor of Surgery in the College of Physicians and Surgeons, New York, etc. With numerous illustrations. 1 vol. 8vo. cloth, \$4.50. D. Appleton & Co., New York. For sale by Cathcart & Cleland, Indianapolis.

This valuable work is a treatise on Diseases of the Bones, embracing their structural changes as affected by disease, their clinical history and treatment, including also an account of the various tumors which grow in or upon them. None of the *injuries* of bone are included in its scope, and no *joint* diseases, excepting where the condition of the bone is a prime factor in the problem of disease. As the work of an eminent surgeon of large and varied experience, it may be regarded as the best on the subject, and a valuable contribution to medical literature.

"The book which I now offer to my professional

brethren contains the substance of the lectures which I have delivered during the past twelve years at the college. * * I have followed the leadings of my own studies and observations, dwelling more on those branches where I had seen and studied most, and perhaps too much neglecting others where my own experience was more barren, and therefore to me less interesting. I have endeavored, however, to make up the deficiencies of my own knowledge by the free use of the materials scattered so richly through our periodical literature, which scattered leaves it is the right and the duty of the systematic writer to collect and embody in any account he may offer of the state of science at any given period."—

Extract from Author's Preface.

Editorial.

MEDICAL societies and clinical reports, correspondance, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

Upon the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers :

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

"Dissections are at last legalized in this State. The Anatomy Bill introduced in the Senate at the request of

the chairman of the special committee appointed for that purpose has passed both houses by an overwhelming majority, and received the signature of the Governor."

So says the *Northwestern Medical and Surgical Journal*: Our tender Legislature could not do such a thing. What! mangle the dead? Oh, no! that were too bad, especially before forgiveness was obtained of their many sins to the living. Indiana is still behind, not yet emerged from semi-barbarism.

Here is the bill as Minnesota has it, which we would commend to the attention of the heathen:

A BILL TO PROMOTE THE SCIENCE OF MEDICINE AND SURGERY IN THE STATE OF MINNESOTA.

SECTION 1. It shall be lawful in cities and counties whose population equals or exceeds ten thousand inhabitants, for superintendents of penitentiaries, wardens of poor houses, coroners and city undertakers to deliver to the physicians, professors and teachers in Medical Colleges and Schools in the State and for physicians, professors and teachers to receive the remains or body of any deceased person, for purposes of medical and surgical study; *Provided*, that said remains shall not have been regularly interred, and shall not have been desired for interment by any relative or friend of said deceased, within twenty-four hours after death; *provided, also*, that the remains of no person who may be known to have relatives or friends, shall be so delivered or received without the consent of said relatives or friends; *and provided*, that the remains of no person detained for debt, or as a witness, or on a suspicion of crime, or of any traveler, or of any person who shall have expressed a desire in his or her last sickness, that his or her body may be interred, shall be delivered or received as aforesaid, but shall be buried in the usual manner; *and provided, also*, that in case the remains of any person so delivered or received shall be subsequently claimed by any surviving

relative or friend, they shall be given up to said relative or friend for interment.

SEC. 2. And it shall be the bounden duty of said physicians, professors or teachers, decently to bury in some public cemetery, the remains of all bodies after they shall have answered the purposes of study aforesaid, and for any neglect or violation of the provision of this act, the party so neglecting shall forfeit and pay a penalty of not less than \$25 nor more than \$50, to be saved by the Health Officers of said cities or other places for the benefit of their department.

SEC. 3. The remains and bodies of said persons as may be so received by the physicians, professors and teachers aforesaid, shall be used for the purposes of medical and surgical study alone; and in this State only; and whoever shall use such remains for any other purpose or shall remove such remains beyond the limits of this State, or in any manner traffic in the same, shall be deemed guilty of misdemeanor, and shall on conviction, be imprisoned for a term not exceeding one year in the county jail, or pay a penalty of not less than \$300 nor more than \$1,000.

SEC. 4. Every person who shall deliver up the remains of any deceased person, in violation of or contrary to any or all the provisions contained in the first section of this act, and every person who shall receive said remains knowing the same to have been delivered contrary to any of the provisions of said section, shall each, and every one of them be deemed guilty of a misdemeanor, and shall, on conviction be imprisoned for a term not exceeding two years in a county jail, or shall pay a penalty of not more than \$1,000.

SEC. 5. This act shall take effect and be in force from and after its passage.

BEHOLD the old becometh new and the discarded and tabooed are received with favor. Cold water is now the

thing in hyperpyrexia—the treatment of Currie that was for some time under a cloud has been brought forth and rebaptised as a new born babe by Dr. Wilson Fox, Wunderlich and others standing as God Fathers. Well do we remember “when we were a boy,” and suffering from fever of what kind we know not, for we had no doctor, that we horrified all the good people by following our own instinct and the teaching of our boyish experience by delluging our burning head by a pan-full of cold water. We had no thermometer, so can not tell the degree of heat involved, but the past experience with semi-sun strokes in our youthfull gambols taught us that cold water was good to not only allay the present ill feeling, but the ulterior bad effect of heat upon the human body.

When Currie by large experience enunciated the doctrine in and urged the practice upon the medical world, some caught at the common sense treatment and used it properly and with success. Others carried it to extremes and with them it fell into discredit, and by their hands its good effect was doubted. Others openly opposed it without experience, and having some non-sensical reasons for such a course. Their action was similar in fact to the good but ignorant neighbors of whom we spoke before; this is but a repetition of what goes on with reference to any doctrine proposed—of any remedy introduced. First, a sovereign balms with some—of no account with others—with a few is understood, then disuse and forgetfulness come—to be followed again by a frothing to the surface. Trial ’tis said, substantiates the good and banishes the poor. This may be taking the years or century into account, but certain the “slough of despond” has to be put through by all alike.

In many cases it is the indiscrete use by the ignorant that brings into disrepute, as to the cold water treatment itself we certainly approve of, and sanction it if used discretely as to quantity and kind of cases, but that there is danger in it if pushed to extremes, even in favorable

cases or where circumstances exists which to the most casual observer should forbid it—none we think can deny. It is for us recognizing the beneficial principal to search for and be influenced by such modifying circumstances.

The same principal as to the “new and old” may be seen in connection with some of the doctrines connected with phthisis pulmonalis. Again, when “we were boys,” or at least when a “student of medicine,” Laennec was the authority among medical men, and all sanctioned the great authors any opinion. Phthisis pulmonalis was tuberculosis and *vice versa* in all cases where bleeding occurred, except in acute effection. The tubercule was the cause of the solution of continuity of some vessel and then the bleeding—the latter being in such cases the pathognamonic sign of commencing, but pre-existing turbercules, at the same time the popular opinion based upon bald experience and common sense corresponded with the one now gaining ground, nay, established—the egg being first piped by Neumeyer and the embryo coming forth in advanced stage of development. “Cold,” according to the old or popular and pneumonia in medical language, is recognized as the cause of phthisis in many cases and hemorrhage from the lungs must be placed in the same category, or at least in such cases as were held to occur at so early a period that the tubercles, although existing according to established maxims, could not be recognized.

While speaking of “old notions,” we would mention the establishment of the “old popular” and the refutation of “old scientific” opinion with reference to the difference of principle involved in epidemic and contagious influence—in other words, that a disease spreading as an epidemic was not of necessity contagious in some degree.

In 1852, when the cholera ravaged this country, well do we remember the first case that appeared in this city,

a German—to whom the disease was conveyed no one knew how. Several friends ministered to his wants—one of whom went home, was taken with cholera and died in a few hours. We were still a “student in medicine,” and when we innocently inquired if this result was not in consequence of contagion or the conveyance in some way of cholera poison direct from person to person, we were simply laughed at for our ignorance and simplicity. “No,” was the answer, “a coincidence only, or at most the fear entertained by the individual with reference to such a condition might have had such an effect upon him as in some way renders him more susceptible to the *materia morbi* floating in the air.” To such a sapient opinion expressed by the best physician in the city, we could say nothing, but did not more than half believe it, and certainly did not act upon it, for we still continue to fear and to shun as we do at the present day.

WE present the advertising rates of the *American Chemist*. Henry C. Lea, Philadelphia, having become the publisher; he promises it as one of the most desirable means of publicity existing for scientific schools and colleges, manufacturers of chemicals, publishers of scientific books, dealers in philosophical apparatus, etc.

RATES FOR ADVERTISING IN “THE AMERICAN CHEMIST.”

	One Insertion.	3 mos.	6 mos.	1 year.
One page.....	\$20	\$54	\$96	\$180
$\frac{1}{2}$ “.....	12	33	58	108
$\frac{1}{3}$ “.....	8	22	38	72
$\frac{1}{4}$ “.....	6	16	30	54
$\frac{1}{8}$ “.....	4	10	19	36
1-16 “.....	3	8	16	27

Fifty per cent. in addition to above rates will be charged for insertions on the outside pages, or on pages facing reading matter. Payments are due quarterly, after the first publication of advertisements.

The American Chemist is issued monthly, each number contained forty double-columned quarto pages. Subscription, \$5 00 per annum, payable in advance.

WE hope that our friends will not forget to send us the results of their observations for insertion in the *JOURNAL*, so that all may be benefited by them. Each one has a duty to perform, the reader as well as the editor.

MESSRS. CODMAN & SHURTLEFF, makers and importers of surgical and dental instruments, 13 and 15 Tremont street, Boston, Mass., send us the following circular which explains itself:

“The object of this circular is to remove the doubts that will naturally arise respecting our means of filling orders since the disastrous fire, but just extinguished, which has laid in ruins most of the business part of our city. We are so fortunate as to have entirely escaped all direct loss: our store, factories, stock and machinery are in their usual condition, no attempt at removal even having been necessary.

“We therefore join with our patrons in the sympathy we are sure will be universally felt for those less fortunate than ourselves. We thank our friends for their liberal patronage in the past, and assure them that our facilities for meeting their wants, and our desire to do so to their entire satisfaction, remain undiminished.”

MEDICAL SCHOOL OF MAINE, at Bowdoin College. Faculty of medicine—Joshua L. Chamberlain, LL.D., President of the College; Charles E. Swan, M. D., from the board of trustees; James McKeen, M. D., John D. Lincoln, M. D., from the board of overseers; Seth C. Gordon, M. D., Andrew J. Fuller, M. D., from the Maine Medical Association; John Appleton, LL.D., lecturer on Medical Jurisprudence; Cyrus F. Brackett, M. D., Professor of Chemistry, Secretary of the Faculty, and Librarian; William W. Greene, M. D., Professor of Surgery; George L. Goodale, M. D., Professor of Materia Medica; Alonzo B. Palmer, M. D., Professor of Pathology and Therapeutics; Alfred Mitchell, M. D., Adjunct Professor of Pathology and Therapeutics; Edward W.

Jenks, M. D., Professor of Obstetrics and Diseases of Women; Thomas Dwight, Jr., M. D., Professor of Anatomy; Robert Amory, M. D., Lecturer on Physiology; Fred H. Gerrish, M. D., Lecturer on Materia Medica; Hamilton E. Hill, M. D., Demonstrator in Anatomy.

The course of Lectures for 1873 will commence January 9th and continue twenty weeks. The Introductory Lecture will be delivered at 3 o'clock P. M.

DR. BROWN-SEQUARD proposes soon to begin, with the assistance of his friend, DR. E. C. SEGUIN, and several New York, Boston, and Philadelphia Physicians and Surgeons, the publication of a new Medical Journal, under the name of Archives of Scientific and Practical Medicine.

The original papers in this periodical will form the largest part of every number, and will treat successively of the most various subjects belonging to all the branches of the Medical Sciences.

Subscriptions will be paid or remitted to Messrs. J. B. Lippencott & Co., No. 715 and 717 Market Street, Philadelphia. or No. 25 Bond Street, New York City.

The annual subscription price will be Four dollars, to be paid in full, in advance. It is designed soon to confine the circulation to yearly subscribers only; the first numbers, however, will be sold separately at forty cents a copy.

The first number, bearing date January 1st, 1873, will appear before the end of December 1872.

MR. T. C. EDWARDS, 64 South Salina Street, Syracuse, N. Y., proposes to assume the publication of the Central New York Medical Journal, under the editorship of Ely Van DeMarker, M. D., on the guarantee of a subscription list of 300. Three dollars a year, in advance, will be the price of the proposed publication.

Obituary.

RESOLUTIONS ON THE DEATH OF DR. A. G. COLLIER.

COLUMBUS, IND., December 16, 1872.

The physicians of the city of Columbus met to pass resolutions, etc., on the occasion of the death of A. G. Collier, M. D.

S. M. Linton, M. D., was called to the chair, and J. H. Ford, M. D., was chosen secretary.

It was moved and passed that Drs. Grove, Roesgen and Davis be appointed a committee to draft resolutions expressive of the feelings of the meeting.

The following are the resolutions as adopted on motion of J. F. Wright, M. D. and seconded by J. H. Ford, M. D.

Resolutions of respect and condolence passed by the physicians of Columbus, at a meeting held at the office of J. B. Grovy, M. D., on Monday, December 16, 1872, on the death of Dr. A. G. Collier.

WHEREAS, The relentless spirit of death has invaded this community and our fraternity, removing from among us our esteemed colaborer, Dr. A. G. Collier, while in the very zenith and usefulness of life, and,

WHEREAS, We feel that by his untimely death, this community has lost one of its most respected citizens, and ablest physicians, and we the benefit of his able counsel; be it therefore

Resolved, That it is due his memory, his bereaved friends and stricken family, that we express our high esteem and admiration of the deceased and deep sorrow at his death.

Resolved, That in an association extending over a period of many years, and of the closest intimacy, we have ever found the deceased a genial and cultivated gentleman, an educated and discriminating physician and an

exemplary and useful citizen; a warm friend, a devoted husband and loving father.

Resolved, That we deeply sympathise with his bereaved family in their irreparable loss and inconsolable affliction, and mingle with theirs our sorrows and regrets.

Resolved, That as in the weakness of man, we can do no more as a faint approach to the need of praise and honor due so distinguished a member of our profession, we should do no less than attend his remains to their last resting place, in a body and as a fraternity.

Resolved, That a copy of these resolutions be furnished to the family of the deceased as a slight testimonial of our regrets for their loss, and that the county papers and INDIANA JOURNAL OF MEDICINE be requested to publish them.

It was then moved that the meeting adjourn. Passed.

S. M. LINTON, M. D., President.

J. H. FORD, M. D., Sec'y.

Miscellaneous.

COLLODION IN CHILBLAINS.—Dr. C. Green, in the *Buffalo Medical Journal*, states that he has used collodion in chilblains with the most decided success. In one case the patient had her feet for a time exposed to severe cold, which produced erythematous inflammation of several of the small toes. They were swollen, red, tender, and itching. He completely enveloped them in a thick coating of collodion, and the contraction which took place on its drying produced so much compression of the vessels that the toes were as pallid as frozen ones. The pain and itching were relieved, and in twenty-four hours these members were nearly well. He has cured pernio of the heel also with this article.

Dr. J. Keary

INDIANA

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FEBRUARY, 1874.

No. 7.

Original Communications.

TOBACCO—ITS INJURIOUS EFFECTS UPON THE HUMAN SYSTEM.

BY LEWIS WILLIAMS, M. D.

Read before the Grant County Medical Society at its 25th Anniversary June 17, 1873.

Tobacco is one of the most active and deadly vegetable acro-narcotic poisons known. Having no particular antidote, acting directly upon the nervous system, enfeebling, deranging or extinguishing the actions of life, it tends directly to produce disease and premature death, of which ample evidence is given in the many departures from health in the organic functions of the tobacco user.

The distinguished Prof. R. Q. Mussey says, in his essay on the *influence of tobacco upon life and health*, that the habitual use of tobacco in any of its forms, as snuff, cud, or cigars, may produce a sense of weakness, sinking, pain at pit of stomach, dizziness, pain in the head, dimness or temporary loss of sight, paleness and sallowness of the countenance, swelling of the feet, an enfeebled state of the voluntary muscles, tremors of hands, weakness, tremulousness, squeaking or hoarseness of the

voice, disturbed sleep, starting from the early slumbers with a sense of suffocation, or the feeling of alarm, nightmare, apoplectic fits, confusion or weakness of the mental faculties, feverishness, and irritability of temper, instability of purpose, great depression of the spirits, fits of unbroken melancholy and despondency, and in some cases entire and permanent mental derangement.

And in addition to the pathological effect enumerated by the distinguished Mussey as consequent upon the use of the noxious weed, we will quote from Dr. John Lizars, of Edinburgh, the following, viz: "Sickness, vomiting, dyspepsia, vitiated taste of mouth, loose bowels, diseased liver, palsy, amaurosis, deafness, emasculation, and cowardice."

It has been held that the numerous cases of insanity in Germany have assigned as one of the causes, the excessive use of tobacco; and that Spain has probably degenerated more rapidly and to a greater degree than any other nation in consequence of the baleful effects of this noxious weed.

It is said that Spain is now a vast tobacco shop, and its only consolation is, that other nations are fast approaching to its level. The great danger to be feared is the enfeeblement of the mind, the loss of the powers of intelligence and of moral energy; in a word, of the vigor of the intellect, one of the elements of which is memory, and result in a lower level of intellectual development than previous to its introduction among the people.

The loss of memory takes place from its use in a greater degree than from the excessive use of alcohol; evidently from its acting more directly upon the brain and nervous system generally. Also, when greatly indulged in, it produces both locally and constitutionally, the most dire effects.

Locally, smoking causes ulceration of the lips, tongue, gums, mucus membrane of the mouth or cheeks, ton-

sils, velum and pharynx. Sometimes it also produces a carcinomatous ulceration of the lips. It is said to be scarcely possible to heal a syphilitic sore, or to unite a fractured bone in a confirmed smoker. His constitution seems to be in the same vitiated condition as in one affected with scurvy. Amaurosis is a very common result of smoking to excess. It is thought not to occur as a result of chewing or snuffing. Deafness is not so common a sequence of smoking tobacco as amaurosis.

Congestion of the brain occurs mostly with those addicted to smoking, in whom a pipe or a cigar is seldom out of the mouth. Apoplexy is produced by excessive smoking and the immoderate use of snuff.

The form of palsy, produced by excessive use of smoking is hemiplegia. It follows as often too much snuff as too much smoking. Emasculation is also said to be one of the effects of the use of tobacco; for instance, as has been said, a father of two or three children has advanced toward thirty years of age, and greatly to his surprise and mortification he observes that he has lost all inclination for sexual indulgence; and, upon investigation it is ascertained that he is a confirmed smoker. Tobacco smokers are also found to be in spirit cowardly, and deficient in manly fortitude to endure any great suffering, or perform any great feat requiring personal courage.

By its general consumption for any considerable time, our race *must* become changed, both in corporeal and mental faculties. We can not fail to be enfeebled in body and mind, and as an inevitable consequence this weakness will be transmitted to our posterity, increasing as it descends one generation after another until we shall indeed become a diseased and degenerated people.

Surgeon Solly, the able clinical lecturer of St. Thomas Hospital, declares that the cases of general paralysis are more frequent than they used to be, and that he suspects smoking to be one of the causes of the increase. May

not this fact account in a great measure for the increase of this class of diseases in *our* country?

The use of tobacco may destroy all the chances for recovery in otherwise favorable cases by its relaxing effect upon the skin and mucus membranes, allowing or permitting the pouring out of their secretions; at the same time there is a great depression of the nervous system and consequently loss of vital powers; hence may follow as a result an easy and almost certain perforation of the intestinal parietes, as in cases of typhoid fever.

Again, it injures health by the loss, diminution or perversion of the normal constituents of the salivary secretions, which is manifest from the universally acknowledged fact that it prevents obesity, or, when it does exist, diminishes it. The above fact, which almost every body, the common observer as well as the medical man has noted, is an evidence that the ordinary effects of the article are in opposition to, and actually prevent the full and complete digestion and appropriation of food.

Hence the greater the amount used, the greater the emaciation, other conditions being equal, and the more the characteristic symptoms developed thereby, which are too numerous indeed, and too well known to repeat here.

Again, a gentleman in the prime of life, and who ought to be in the vigor of manhood, goes to the office of a physician to consult him with reference to his health; the patient is losing his health, his energy, his appetite, and his flesh. He gave positive evidence of great nervous prostration, his hand is unsteady, his skin of a dusky, smoky appearance. He is restless and wakeful at night—when he has finally fallen asleep, he startles from his slumbers with a sense of suffocation, or sense of alarm. He is discouraged, despondent, greatly alarmed as if in view of an impending danger or of some overwhelming disaster.

Again, it may be he is suffering from nausea, vomiting,

dyspepsia, loose bowels, diseased liver, numbness, loss of sight or hearing, loss of sexual desire, cowardice, confusion or weakness of the mental faculties, irritability of temper, instability of purpose, or it may be there is entire and permanent mental derangement, or any other pathological symptoms having their origin in the nervous system—and yet, in consequence of the almost universal use of this weed, and even by those who are, or ought to be the conservators of the public health, and who, in consequence of its baleful effects on vision have been and are still so blinded as to render them incompetent to treat, or even to give advice properly to the poor unfortunate sufferer.

The life forces are capable in each individual case of enduring only a certain amount of resistance, which will be just equal to said forces. Now if the life forces are in any manner interfered with, so as to lessen them, just in that proportion may the resisting forces be diminished and yet be productive of the same result.

From which proposition may be deduced the following: That any article taken into the system through any of the avenues that shall affect the human system deleteriously, as has been proven tobacco does, will detract from the powers of resistance, and hence, produce a disparity in the life and resisting forces, and as a consequence, an attack of sickness, or a mechanical injury, or a surgical operation that would be endured and recovered from, without even being in much danger, would, under such deleterious influence, terminate in death.

And, again, from the same proposition we arrive at the fact, that many persons who, perhaps, would be naturally in possession of ample intellectual and physical vigor to insure a moderate, or fair degree of success in life would, if poisoned by the injudicious use of this weed have their sensibilities dulled, so as to absolutely prevent success in the race of life in which we are all engaged.

There are many, no doubt, who, unless their minds are

in a normal condition and under the most powerful natural stimuli, such as the keen demands of nature magnifying their mental or physical wants, can accomplish any thing of importance, but who if poisoned by the common effects of tobacco are sure to sink so low physically and intellectually as to make it morally impossible for them to succeed in life.

Now, in conclusion permit me to say that the highest order of intellect, developed and strengthened by education, may endure a vast amount of abuse in this manner, and yet not seem to be injured; who can say to what heights of eminence the person might not have attained in absence of the deleterious effects of this noxious weed?

Proceedings of Societies.

MEETING OF THE STATE BOARD OF HEALTH OF MICHIGAN.

The State Board of Health met at Lansing, January 13, 1874, at 9 o'clock, in the office of the Secretary of State, this being the time appointed for their regular quarterly session. The meeting was called to order by the president of the board, Dr. Hitchcock. There was present the following members: Dr. H. O. Hitchcock, of Kalamazoo; C. H. Brigham, of Ann Arbor; Prof. R. C. Kedzie, of the Agricultural College, and the Secretary, Dr. H. B. Baker, of Lansing. The minutes of the last meeting were read and approved.

Dr. Kedzie presented to the board for adoption a new tester, which it is hoped district inspectors of oils will use. Unlike the tester that Mr. Fowler uses, it is covered by a cover that does not allow the gasses from the heating oil to escape, but confines them so that a well-

lighted match may be brought in contact with the gases through a small hole in the cover above the oil, and this continued with every increase of temperature of two or three degrees till the vapors burn with a blueish flame. The lowest temperature at which the vapor will thus burn is called the flashing point. To ascertain what is called the burning point, the oil is uncovered by the cap of the cup containing the oil being removed. At every rise of one or two degrees a lighted match is plunged into the oil till that point is reached, when, instead of extinguishing the match, the oil takes fire. This is called the plunge test, and the lowest temperature at which the oil takes fire is called the burning point. Dr. Kedzie experimented before the board to show them wherein the "State Board of Health tester" was superior for testing purposes to that used by Ohio inspectors. He operated upon some oil obtained from one of the stores in this city, which was branded as 150 deg. fire test, and which flashed at 110 deg., and which took fire at 133 deg. by the new test.

Dr. Baker, the Secretary of the board, then reported to the board his observations while at the meeting of the "American Public Health Association," recently held in New York city.

"On my way to New York to attend the last meeting of the American Public Health Association, I stopped for one day at Poughkeepsie. While there I visited the Hudson River State Hospital for the Insane. In a published paper sent to each member of the board, I have given some of my impressions concerning this hospital. I also visited the water works at Poughkeepsie. The water is taken from the Hudson River just above the city. It is pumped into the settling basin, being caused to flow over a dam several feet high, thus thoroughly aerating it. After settling it passes through filters into another large receiver, whence it is pumped up to a higher and stored in a capacious reservoir. I did not learn

the exact amount of organic and inorganic matter in the water after filtration ; but the water is regarded by the citizens as much better than that previously obtained from wells.

In a conversation with Mr. Collingwood, an intelligent man, an old resident of Poughkeepsie, and present proprietor of the Opera House, he stated several facts of interest in a sanitary way. Not far from where the Opera House now stands was formerly a hotel. The water supply for the hotel was from a well, and the water was used in great quantity, and was considered of ordinary quality. When the hotel was abandoned, and the well unused for a short time, the water became so impure that it emitted a bad odor, and the impurities was apparant to the unaided vision. The well undoubtedly drained the locality immediately surrounding it, and by long occupation the soil had become saturated with filth. Mr. C. said that his experience in his own family had taught him to beware of water supplied from wells in localities where the soil had become to some extent saturated with decomposing organic matter. Formerly he had much sickness in his family from diarrheal diseases, and for a long time the cause seemed unaccountable. He finally concluded that it was the well water. He had a large cistern made with apparatus for filtering and storing rain water, and had no diarrheal diseases of any consequence in his family thereafter.

While in New York city the members of the association were invited to visit some of the slaughtering and rendering establishments, with a view of learning the extent to which the bad smelling gasses arising from the processes employed in these establishments were either destroyed or given out to the surrounding atmosphere. One other member and myself accepted the invitation, and in company with Assistant Sanitary Superintendent D. E. H. Janes, and Sanitary Inspector Dr. Judson, we were driven out to that portion of the city and examined

thoroughly the methods adopted in two of these establishments. In the first one we visited the rendering was accomplished in strong iron vessels tightly inclosed, but a tube for the escape of gasses arising therefrom leading from each cauldron to a little building outside the main one, where the gas was passed up through layers of quick lime for the purpose of purifying it, after which it was conveyed to the furnace and burned. A jet from the same tube in the engine-room could be lighted and employed to furnish light. This jet was lighted in our presence, and burned about as ordinary gas. Theoretically, this system should destroy much at least of the disagreeable gas. Practically, it is not very satisfactory. The purifying apparatus must be opened, and the lime exchanged quite frequently, and the overseer stated that the conditions which we found on our visit were not unfrequent, viz: An escape of the sickening odors through imperfect closing of joints of the various tubes, and especially the "man hole," through which the lime is introduced.

The next establishment which we visited had a much less complicated, but very much more successful apparatus for disposing of bad gasses. It consisted of tubes by which the gasses were conveyed immediately into the furnace where the heat was greatest. What proportion of the deleterious gas was destroyed we could not tell without an examination of the smoke issuing from the top of the chimney; but it seemed probable that it was in great part destroyed, and what was not destroyed was conveyed to such a height above the ground, that there would be great delution with air, and opportunity for oxidation in the way, before coming to be breathed by the people. I laid down in my own mind the general principle that wherever foul gasses of this character can conveniently be conveyed directly into a furnace, this promises a very favorable method of destroying them. This principle is applicable to other gases than those

generated in rendering and manufacturing establishments and may be applied to the ventilation of privy vaults, which in cities are frequently so situated as not to be safely ventilated in any other manner. By connecting the vault with the furnace a draft downward through the seat-openings, may be maintained, and the bad air passed through the furnace and in great part destroyed.

While in New York I spent one evening very profitably in the company of Dr. C. B. White, of New Orleans, President of the State Board of Health of Louisiana. He gave me much interesting information concerning the epidemic of yellow fever in New Orleans, during the past summer. I was especially interested in the account of his method of dealing with it, and the apparent results. It may be stated briefly that his methods were based upon the view that in yellow fever the *locality* is infected, but the disease is not contagious, in the ordinarily accepted meaning of the term. The disease seems to spread just as it would if it depended upon a low form of vegetable growth, propagated along the surface of the ground and climbing up inclined or perpendicular surfaces. When a case appeared in a locality, one of the first things they usually did was to surround the locality with a belt of disinfectant. They employed for this purpose a solution of crude carbolic acid, which was sprinkled upon the street from a street sprinkler, making a belt about four feet wide entirely around the block or blocks in which the disease was located. Sometimes two such belts were sprinkled. Then the premises occupied by the patients were thoroughly disinfected, using a similar solution applied by a hand sprinkler. When a dwelling or room was to be disinfected, it was done with a solution of pure carbolic acid applied by means of a steam atomizer, and the walls, ceiling, and all articles in the room were subject to the spray. With a clear solution of pure acid even silk goods could be safely treated with the spray without damage. After the death of a pa-

tient the corpse and entire contents of the room and premises occupied were thoroughly disinfected. The clothing of the corps, of assistants who performed this duty was so saturated with vapor of carbolic acid that their immediate presence could be ascertained by the sense of smell; and not one of these officers contracted the disease, although some of them had never had it. One such lived in the same block where the disease prevailed, on premises immediately in rear of his own. He kept his premises well disinfected, and neither he nor his wife contracted the disease. Dr. White says that there was scarcely an exception to the statement that the disease did not cross the belt of disinfectant drawn around infected locality. In one or two instances, which at first appeared exceptional, it was ascertained that the new cases of disease outside of the belt were contracted by the persons remaining over night in the same building where yellow fever prevailed, and thus contracting the disease, they carried it to their homes outside the belt of disinfectant. Each new case made, according to the view acted upon, a new infected locality, which was treated as before, and its spread was apparently prevented thereby.

The regular meeting, which will also be the annual meeting, will be held on the second Tuesday in April.

The following resolutions was adopted: That a vote of thanks be tendered to Dr. Kedzie from the board for his valuable new oil tester.

On motion the following resolution was adopted:

Resolved, That it shall be proper for each member of the State Board of Health to report to said board facts which may come to their knowledge concerning the existence of any removable local cause or conditions, which may injuriously affect the public health of any city, village, town, or district in this State, and to make such recommendation for the removal of said causes as he may deem practical.

By request of the board Dr. Baker gave a brief histo-

ry of the organization and membership of the American Public Health Association, and an outline view of its proceedings at the last two meetings. He stated that at the last meeting he offered the following resolutions, which were adopted by the association :

Resolved, That a committee be appointed to prepare a form for a law providing for the organization of a National health department, or proper central organization, having relations to the Government and to the people relative to the interests of health and life similar to those of the Department of Agriculture, relative to the interests of agriculture, or of the Bureau of Education, relative to the educational interests ; that this committee be instructed to co-operate with similar committee or "section" of the American Medical Association ; that when a plan for a law shall be perfected, said committee be authorized to memorialize Congress for the enactment of such a law ; and that the committee report whatever action may be taken to this association at its next meeting.

Resolved, That in the appointment of this committee each State shall, so far as practicable, be represented by one member of this association ; that the Hon. Dorman B. Eaton, of New York, be the chairman, and that Elisha Harris, M. D., secretary of this association, be the secretary of the committee, the other members to be appointed by the President of the association.

PROCEEDINGS OF FOUNTAIN AND WARREN MEDICAL SOCIETIES.

This Society met at West Lebanon Thursday, January 8, 1874 ; Dr. Ross, of Williamsport, presiding.

The minutes of the previous meeting having been read and adopted, the president introduced Dr. Lomax, of Marion, as a delegate from the Grant County Medical Society, who being invited to address the meeting, did so, and explained the object of his visit, which was to urge physicians to form Societies in every county, and

then to become legalized corporations by recording their constitutions in the office of the county recorder, after having adopted a seal, which ought to be described in the record. Medical Societies thus organized would become legal corporations, and could take contracts to perform services in public institutions, as in jails, asylums, hospitals, and poor houses, and take charge of county poor under the orders of the proper county or township authorities.

On motion, the subject was referred to the committee on the constitution, consisting of Drs. Watson, Weldon, and C. V. Jones.

The committee to which was referred the amendment to the constitution which was offered by Dr. Weldon, reported that it was inexpedient at the present time, and that Dr. W. be allowed to withdraw the papers.

The committee on the constitution reported that they had prepared amendments to the constitution, which were submitted by sections and laid on the table for action at the next meeting.

The Secretary presented several communications. One from Dr. Douglas, Dean of the Faculty of the University of Michigan, informing the Society, in answer to inquiries, that no chair of Homeopathy would be established in that Medical school.

Dr. J. T. Rice, of Attica, reported and described a very interesting case of dropsy of the uterus.

Dr. Ross, of Williamsport, reported a fatal case of traumatic tetanus.

Dr. Weldon reported a case of cancer of the stomach, yet under treatment.

Dr. Watson a case of luxation of the jaw, to which he had been called; he found that an irregular who had been attending the case, had pronounced it lock jaw, and was applying warm poultices as a part of the treatment.

The reported cases were canvassed by the Society as fully as time would allow.

By general consent, it was ordered that the annual meeting in April next, be held at Veedersburg, for the greater convenience of a very large majority of the members.

No further business appearing, the Society adjourned.

SAMUEL J. WELDON, Sec'y.

Reviews.

LECTURE ON CLINICAL MEDICINE, by A. Trousseau, late Professor of Clinical Medicine of the Faculty of Medicine, Paris, etc., etc.; translated from the 3d revised edition, by Sir John Rose Cormack, M. D., F. R. S. E., Fellow of the Royal College of Physicians of Edinburgh, etc., etc., and Victor Razine, M. D., Assistant Physician to the National Hospital for the Paralytic, etc., etc.: complete in two volumes. Lindsey & Blackiston, Philadelphia; Cathcart & Cleland, Indianapolis.

A DESCRIPTION OF NEW INSTRUMENTS for making examination and applications to the cavities of the Nose, Throat, and Ear, and a few remarks about the remedies that may be administered by means of them. Illustrated by eleven Engravings; by Thomas F. Rembold, M. D., St. Louis, Mo.

This little pamphlet gives a moderately full description of various speculums, with receipt of medical solution, it is suitable for the specialist or general practitioner, though "little," it is "good."

A HANDBOOK OF THE THEORY AND PRACTICE OF MEDICINE, by Fredrick T. Roberts, M. D., B. Sc., M. R. C. P., Fellow of University College, etc.; Lindsay & Blackiston, Philadelphia, 1873. Cathcart & Cleland, Indianapolis.

This work we have examined carefully, and find it to be one of the best text books on the practice of medicine we have, not so elaborate as Wood or Aikens, better

as to treatment than Niemeyer, and better arranged than Flint. It is a work every student and practitioner should have. One objection, however, is that the treatment of various diseases, are disconnected from the description of such diseases and attached to that of others.

A TREATISE ON THE DISEASES OF THE EYE, by J. Soelbery Wells, F. R. C. S., Doctor of Medicine of the University of Edinburgh, etc.; Second American from the Third English edition, with additions; with two hundred and forty-eight Engravings on wood and six colored plates, together with selections from the best types of Prof. E. Jaeger and Dr. H. Sneller; H. C. Lee, Philadelphia, 1873.

This elaborate work needs no words of explanation, as it has been before the profession for some years, and their judgment accords it the first place among the authoritative in ophthalmology. There is nothing to compare with it in completeness of detail unless it be that of Prof. Sneller, and according to our view the present work is the best of the two.

A SYSTEM OF MIDWIFERY, including the diseases of Pregnancy and Puerperal state, by William Leishman, M. D., Reginus Professor of Midwifery in the University of Glasgow, etc.; 182 Illustrations; H. C. Lee, Philadelphia, 1873; Cathcart & Cleland, Indianapolis.

"The author of this work furnishes to students and practitioners a complete system of midwifery of the present day. Something "to compare with Cazeau and Sconzoni."—*Preface*.

We shall take occasion to notice this work soon. At a partial review, we should judge it to be one of the most complete works upon the subject that is now before the medical profession.

SCRIBNERS' ILLUSTRATED MAGAZINE for Girls and Boys, conducted by Mary Mapes Dodge; November, 1873; Scribner & Co., 654 Broadway, New York.

In "days of auld Lang Syne," when *we* were boys, they did not have such things as the present magazine. Of illustrated periodicals there was either none or filled with geometrical diagrams, abortive attempts to de-

lineate natural history or produce a "border" scene with Indians, fighting women, and dead child thrown in to give zest and point. Peter Parley's stories, with Robinson Crusoe were the softest food the child had. Glorious as they were they did not fill *all* the space. Attempts similar to the one before us, to fix the attention of the *very young* by easily understood and attractive stories highly illustrated where the results of later thoughts. May the "coming man" look back upon the "St. Nicholas" of Scribner, with as fond remembrances as we do upon the veritable St. Nicholas himself. Not the least important, we are told that the conductor of the magazine is Mrs. Mary Mapes Dodge—that this is *not* Mrs. Mary B. Dodge, or Miss Mary A. Dodge, alias Gail Hamilton—but the author of "Hans Brinkton, or the Silver Skates." While we attend to more "solid" matter, let us not forget the young.

AN INQUIRY INTO THE NATURE OF THE UTERINE SUPPORTS and of the Causes of Displacements; by Samuel C. Busey, M. D., Washington, D. C.; Physician to the Louise Home, one of the Physicians to the Children's Hospital, etc.

We can not do better than make a few extracts from this pamphlet, to show the tenor of the doctor's argument:

"In regard to uterine displacements authors do not correctly and distinctly trace the relationship of cause and effect. Every conceivable influence, recognized co-existing lesion, or associated mal-relation has been denominated a cause of displacement, when, in fact, such morbid condition was simply an effect of the operation of a primary cause, which primary cause might have produced any one of the existing conditions antecedently to the others, or all simultaneously, or each might have followed consecutively in the chain of alterations, consequent upon the continuous operation of such cause. To illustrate: It is insisted by some that cystocele is the initial mal-relation in the causation of procidentia, and that relaxation of the utero- aural ligaments is the morbid condition primary to retroversion, whereas clinical

observation, as well as sound reasoning, demonstrate that cystocele does not necessarily precede, as a cause, procidentia, nor ligamentous relaxation a retroversion. The uterine displacement and associated mal-relation may occur *pari passu*, or either may follow the other, or both may be consecutive results of the persistent action of a primary cause.

"These preliminary suggestions bring me directly to the consideration of the mode and manner of evolution of the essential force or forces concerned in producing uterine deviations, for I maintain that these displacements find their causes in the action of new forces generated by anatomical mal-relation, or in the irregular or disturbed operation of normal forces consequent upon anatomical mal-relation; and, *per contra*, that the uterus finds its support *in situ naturali* in forces due to normal anatomical construction and arrangement."

"Accepting the conclusion of Weber that the body, in the erect position, is balanced upon the ilio-femoral articulations, and the theory of Duncan that the line of gravitation of the parts above is through a vertical line passing through these articulations, or the more commonly accepted view that the line of gravitation is through the axis of the body, as previously described; it is perfectly evident that the vertical line of pressure of the super-incumbent viscera can not be through the longitudinal uterine axis, but may be deflected from the anterior abdominal walls, against which it must impinge, through the line of the longitudinal axis, upon and against the fundus, and also, in a direct line, upon its attachments. Hence, it is that, usually, in virgins, and not unfrequently in multiparæ, when the uterus is healthy, that posterior axial deviations are the immediate result of some violent and sudden shock to the trunk, whereby this deflected force is momentarily increased beyond the natural resistance of the antagonistic influences, or is expended upon the anterior uterine surface, because the intestines are forced below the normal relation of the long axis. The same deflection of force would follow, as surely, though not with such momentum, relaxation of the abdominal parietes, which permitted such decent of the intestines below the umbilicus, as would change the line of vertical pressure to the direction of the longitudinal axis. Retro-

version and descent may result from such deflection of the natural force of gravitation of the abdominal viscera, to which may be added the auxillary force derived from muscular contraction or increased pressure of the super-incumbent viscera; and thus it is that abdominal tumors, enlargement of the abdominal viscera, accumulation of fluid in the peritonæal cavity, tight and heavy clothing, diminished thoracic expansion, unusual and violent effort may occasion uterine mal-position—their agency being always enhanced by the inevitable mal-relation of parts consequent upon pregnancy. Thus it also is that sudden prolapsus is chiefly the result of abdominal pressure, concussion, straining, carrying heavy weights, lifting, stooping, etc.”

Many other points of interest are ably noted.

SMITHSONIAN MISCELLANEOUS COLLECTION, 266. The Toner Lectures, instituted to encourage the discovery of new truths for the advancement of medicine; Lecture I; on the structure of Cancerous Tumors and the mode in which adjacent parts are invaded; by J. J. Woodward, Assistant Surgeon, U. S. A.; delivered March 28, 1873; Washington, D. C.

The following notice is from Joseph Henry, Secretary Smithsonian Institute :

“The ‘Toner Lectures’ have been instituted at Washington by John M. Toner, M. D., who has placed in charge of a Board of Trustees, of which the Secretary of the Smithsonian Institution is one, a fund, ‘the interest of which is to be applied for at least two annual memoirs or essays relative to some branch of medical science, and containing some new truth fully established by experiment or observation.’

“As these lectures are intended to increase and diffuse knowledge they have been accepted for publication by the Smithsonian Institution in its ‘Miscellaneous Collections.’”

Dr. Woodward’s purpose, and the plan of his lectures, is expressed by himself as follows :

“I propose then, first, to sketch as briefly as possible the modern progress of our knowledge of the minute anatomy of cancerous growths, and to indicate some of the most important points as to which conflicting views still exist; I shall next select a few typical specimens

from the microscopical collection of the Army Medical Museum, and endeavor to show, with all modesty, how far the structural details they exhibit correspond with the results obtained by European histologists; where differences are to be noticed I shall not hesitate to point them out, and I hope to be able to present several significant matters of detail which have either been entirely overlooked or not described with the accuracy they deserve."

In illustrating his subject he made use of his photomicrograph apparatus to throw upon the screen seventy images of different specimens, prepared by himself.

In his text he speaks of the early opinion of Schwann, etc., who supposed cancerous germs to originate from free cell obtained from the blastema, thus placing such morbid products as special blood diseases.

Virchow arose, and in accordance with his general view, looked upon them as the offspring of normal connecting tissue, that primary blood dyscrasiæ did not exist.

Carl Thiersch announced the doctrine that such tissues were primarily from the epithelium cell of the lower soft layer of the epidermis, etc., and gradually encroached upon the connective tissue. His views are supported by the history of development of the embryo, it being philosophical to consider the epithelium element of cancer as originating from the supposed or embryotic layer, and not from the middle or connective tissue.

Prof. Waldeyer, of Breslau, extended the views of Thiersch to other varieties of cancer, other than the epithelium, as the various epithelium of different parts have peculiar characteristics, so the peculiarities of given cases of morbid growth is dependent, in a great degree, on such varieties of the normal tissue. Cancer of the mammary gland spring from the lining membrane of the tubes, etc. Cancer of the stomach from the gland of the mucus membrane, etc. Waldeyer also favored the opinion of the multiplication of cancerous

growth by cancerous emboli through lymphatics or nerves.

Dr. Classen concluded from investigations on cancer of the cornea, that the elements of cancerous growth were migrated with blood corpuscles; to this view the author inclines, although he "can not deny that transformation of the true gland tissue plays a certain role in the production of cancerous growth."

Billroth adheres to the views of Waldeyer, Rindfleisch, rather to those of Classen.

A number of specimens are presented, first of epithelium cancer, from which the author is inclined to the opinion that the growth is partly from cell multiplication, and partly from "wandering corpuscles" becoming fixed and developed into epithelium cells.

Other specimens of cancerous growth of the stomach, breast, lungs, etc., are shown and described. As to his final conclusions, we quote the following:

"And at this point the important question of prognosis thrusts itself again upon our attention. Can we be sure that a growth which has the anatomy of a cancer will have the history that is usually indicated by the word malignant; that it will ulcerate if left to itself; that it will recur if extirpated; that in either case similar growths will develop in some of the internal organs; and that the patient will surely die from this cause, if not from the primary disease? On the other hand if a tumor be extirpated which does not possess the anatomy of cancer; in which no proper cancer cylinders have been formed; as for example in the first case of mammary tumor to which I alluded this evening, can we be sure that the growth would not have ultimately acquired the cancerous anatomy if it had been let alone? Can we be sure that it will not, in spite of its timely extirpation, recur and prove fatal?

"A proper discussion of these important questions, based upon a consideration of all the evidence, would require much time and thought and be a work of no small labor and difficulty. Of course it can not be undertaken in the present lecture. Nevertheless it may not be amiss to state that the general tenor of surgical

experience would seem to give a negative answer to both these important questions. With regard to the first, the negative answer is the justification of the operation of extirpation, still so generally resorted to, and the motive for urging operative interference as early as possible. It implies a more or less confident belief in the local significance of the primary lesion, and it is not inconsistent with the circumstance that practically the majority of tumors, which on extirpation prove to have the anatomy of cancer, do in fact recur, for the incomplete extirpation of marginal portions of the primary growth, or the existence already at the time of the operation of small secondary growths in distant organs, will sufficiently account for this result, without any more violent suppositions.

“On the other hand the negative answer to the second question might have been anticipated on purely anatomical grounds, since it would seem that in every cancer there must be a period when the small-celled infiltration of the connective tissue, and perhaps some increase in the number of the epithelial elements of any glandular part involved, is all that has taken place, and whenever this process commences simultaneously in a comparatively large area instead of in a small one—in the whole mammary gland for example instead of in a small part of it—the size of tumor may lead to its extirpation before its anatomy has become characteristic.”

Such works as this of scientific investigators will if only a moiety of truth is contained therein, advance medicine as a science, and aid the applications of *art*.

Editorial.

INSANITY AND CRIME—THEIR CAUSES AND PREVENTION.

That crime exists to a fearful extent, among the young and old, we need not be told, or that pauperism abounds with work enough and pay sufficient to save from such

a fate, is a fact patent to every one. That the cause of this crime as well as the source of this pauperism, may be known to a few is probable, but by the many it is looked at in simple wonder; they see the law baffled in preventing or punishing the one, and society impotent to stay or remedy the other, and knowing they have not the power to act where those fail, they are paralyzed in their efforts and blunted in their feelings.

He who looks into the matter properly, will see that although remotely the cause of crime may be legions, they all concentrate into a few; among the most prominent are pauperism and bad educational surroundings, and conversly that the cause of pauperism in this country at least is, to a large extent, from *willful*, not *forced* idleness and bad surroundings.

If such are the causes of crime and pauperism, what is necessary for their prevention and punishment? For both deserves punishment in the exact degree as the above causes are found to operate in any given case. As to the punishment of the more frequent crimes we have nothing to say, they are provided for in perhaps the best manner possible, all things considered. But for the minor offences, and for the youthful criminal especially, we consider no adequate means have been provided.

If crime results from pauperism and bad educational surroundings, pauperism must be corrected and the surroundings changed before any good will result. But pauperism is from idleness and other bad surroundings, therefore at the root of the tree lay the ax. The penitentiary is not the place for the offenses we are considering, and if they were the State would be bankrupt in building them; jails are but temporary bastiles, and were never supposed to be suitable for punishment, either reformatory or preventive; the houses of refuge, even if the system was capable of extention as broadcast as is the population, is not of sufficient practical value

to supply such wants. Though the idle and vagabond criminals may not be numerous in any one place, they are collectively a host, and the petty or minor crimes connected with such, and that call for restraint or punishment would so heavily tax the people to provide means for such ends, that justice would forbid as well as popular opinion condemn any movement contemplating sequestration as preventive or the curtailment of liberty as punishment for such crimes, not having associated therewith, and indeed, having as an essential, a self sustaining, nay, a *producing* element. The surroundings must be improved, and work *forced* upon the wilfull idle, such work as will not deplete the honest revenue, but rather add thereto, or at least support those who perform it. Such is the most efficient *direct* means for remedying the crime-producing pauperism and vagabondism that now so largely prevails. But this coercive work with confinement as accompaniment, has an important *indirect* effect in checking crime, often through the elements of example and fear in supplying incentives for industry, and thus leading out of pauperism and often through the same elements decidedly subduing the most insubordinate and checking the most vicious.

Common sense must indicate the course to pursue, and the gibbering of legal technicalities and pseudo-philosophy must give place to the teachings of practical life. But apart from those elements, willful idleness and bad surroundings leading to pauperism and ending in crime, there is the well recognized *dangerous class*, who are controled or influenced by a more than usual *faulty organization*, added to those circumstances that leads or drives the other into crime. From these the rank of criminals are largely recruited; 'tis not that they are *insane*, as some superficial observer contends, but that as their organization deviates more or less from a certain normal standard, they are from that cause alone more and more liable to take on abnormal and hu. aspects, to enter

more readily into *bad surroundings*, more disposed to *indolence*, and as a consequence to pauperism and crime. Or if, with the few, their condition in life prevents the application of the term *pauperism*, still their *indolence* and *bad surroundings*, (which they will find,) added to the increased development of faulty habits, disposition, etc., the direct resultant of *bad organization*, uncontrolled by the influence of fear or a dominating authority, leads as direct to crime in this as in the former case.

This *dangerous* class then, when in any case they can be identified, should be placed in the same condition as to forced work, restraint of liberty, and subordination to authority, as that of the first class, whose organization was not so faulty, but whose *surrounding* gradually educated them into pauperism and crime.

But it is not crime alone that we would restrain or punish by this work-house system—*insanity* would to a great extent be prevented. It is without doubt true that insanity increases with civilization. We shall not stop to account for it in full, but if insanity was the only curse of humanity, a barbarous people would be the happiest.

It is also true that a large proportion, two-thirds or three-fourths, of the insane are from the pauper class, and that a large proportion from this class fall under one of the two classes we have mentioned above, where willful idleness and bad surrounding *alone* have led to pauperism, or where in addition a more than usual faulty organization was added as a cause, so that it logically follows that the same means adequate or necessary to prevent *crime*, is applicable to the prevention of a proportional amount of *insanity*.

It needs no argument to show that this is very far from saying that crime and insanity are the same, for if so then are we all insane; we can not reason ourselves into such a belief, for the lights of common experience as well as our own consciousness gives it the lie.

'Tis said "the inflamed passions are near akin to insanity," and brutality being a deficiency of moral sentiments, agrees in all respects with moral insanity, the *acts* may indeed be the same, and to him who makes no distinction it is useless to offer arguments, but even if they were, reformatory punishment would not be out of place, and preventive means would apply as readily as in the other view.

The remedy for a large proportion of crime and insanity, in accordance with views expressed, is to be found in a *work house* system. Here the youthful desperado will be snatched from his bad educational surroundings, and through discipline and example educated properly, even the *dangerous class*, oppressed by a more than usual bad organization, would receive the same benefit, for even the idiot can be *educated* in a greater or less degree, as Sequin has most clearly shown.

This is no new idea, nor has the trial test to be made to prove its efficiency. It is true, it has seldom been carried quite far enough, but that it may and can be managed to satisfy our most sanguine expectations is equally true, all this can be accomplished as we have above asserted without expense to the public save in the initiatory step, self sustaining and productive in its nature as it is. Never until we have a work-house system, with perhaps asylum attachments, where temporarily any acute cases of insanity could be treated until sent to the asylum already instituted for their reception, will we know how or have the power to handle the youthful criminals, or any of the classes enumerated in this article. A thousand crimes and a thousand regrets, numerous arrests only be turned adrift again, acts of incipient or full fledged insanity, investigated at enormous cost, and whether found guilty or innocent, equally impotent to suggest a remedy adequate, all this and more can be safely, cheaply, and surely remedied if the State and

municipal governments act with wisdom, and are guided by experience and common sense.

Of course we would have a system of reform connected with such a scheme, rewards and punishment should be the means used, the machinery for conducting which could be easily arranged.

Indianapolis being, if not the centre of the earth—as the magical map of the Indianapolis *Sentinel* would indicate—still the centre of the State, should *at once* take steps to introduce the subject, guided by the light of other experiments and profiting by their mistakes and successes, it could be made successful, and finally would permeate the whole State.

THE December number of *Wood's Household Magazine* is replete with good reading—entertaining sketches, stories, poems, etc. Address *Wood's Household Magazine*, Newburgh, N. Y.

WE have received a copy of the *Illustrated Living World*, a holiday of the *Illustrated Record*. It is a pictorial paper full of spicy bon-bon. Address, *Illustrated Record*, P. O. Box 2141, New York.

IN the Editorial giving the History of Medicine in this city, we omitted to place the name of R. N. Todd, M. D., as one of the Board of Directors of Bobbs Medical Library; also, that Dr. John Kitchen was prominent in resurecting the City Hospital; and again, that Dr. Woolen and Dr. Jameson were omitted in our list of Hospital staff.

FOR SALE—The property of a physician in Richmond, Ind. The property consists of a two story brick, of twelve rooms, office attached of two rooms, barn and other buildings in good order, good cellar and water. It is one-half square from the business center of the city. Practice of eighteen years duration, worth \$5,000, both medical and surgical, to go with property. Enquire of real estate dealers, Cloggshall & Dickinson, Richmond, or the Editor of this Journal.

Obituary.

IN MEMORIAM.

The following resolutions were passed at the late meeting of the "Fountain and Warren County, Medical Society.

It becomes the melancholy duty of the Fountain and Warren County Medical Society, to announce to its friends and to the public, that it has pleased the great Creator, to remove our colleague and brother, Doctor Robert Stevens, of Chambersburg, from this life.

Dr. Stevens died at his residence near Chambersburg, in Fountain County, on the 12th day of August last, aged about 60 years. He read medicine in the office of a respectable physician in his native State Virginia, and came to Indiana about 1835. In the year of 1838, he settled near Van Dorn's Mill, on Coal Creek, afterwards removing to Chambersburg, in or near which he dwelt and practiced his profession until his death.

He established at an early day, a wide-spread reputation by his successful treatment of milk-sickness, a disease which was the scourge of the then new country, a reputation he maintained throughout his whole life.

Dr. Stevens was among the first members of this Society, having joined it on the 25th day of May, 1867. He earned the respect of his medical brethren by his quiet, modest and unostentatious demeanor, and of his friends and neighbors, by his habits of industry and sedulous attention to his business and by the honorable and conscientious discharge of the duties of an onerous profession in a sparsely settled country.

Therefore be it resolved, that the Society give expression of its sense of its loss, and of respect for the memory of our deceased colleague, by placing this obituary notice and memorial resolutions upon its records, and by

furnishing the family of our deceased brother with an engrossed copy thereof.

JUSTIN ROSS, President
SAMUEL J. WELDON, Sec'y.

IN MEMORIAM.

It is with feelings of the most profound sorrow that the Society have to announce to the profession the death of their estimable colleague, Dr. W. Leyman, of Attica, who died at Ft. Wayne, Ind., on the 24th day of July, 1873.

Dr. Leyman died the age of 64, was a graduate of the Jefferson Medical College, of Philadelphia, Penn. He entered the field previous to becoming of age, and continued in practice with a few short intermissions, until a short time previous to his demise. Being engaged in the active duties of the profession near 50 years, he was ever ready to administer to the wants of suffering humanity, be the call from the affluent or the cold and uninviting recesses of poverty. The community of his fellow-citizens in the field of his achievements are fully aware of the fact that a great light in the medical profession as a practitioner has been extinguished and

WHEREAS, The greatest Physicians has seen fit to call him away.

Resolved, That we express our deepest sorrow at the great loss which the Society has sustained, and in adding tribute of reverence, the Society is content to rest his memory upon the deeds of his life more eloquent and lasting than the eulogy of men.

Resolved, That a copy of memoriam and resolutions be sent to the Fountain and Warren County papers for publication, and a copy sent to the family of the deceased.

JUSTIN ROSS, President.
SAMUEL J. WELDON, Sec'y.

Miscellaneous.

HOW TO VENTILATE SCHOOL-HOUSES.

Abstract of Paper read before Michigan Medical Society, by R. C. Kedzie.—The ventilation of a school-room is so intimately associated with the warming of the same, that the two cannot be satisfactorily considered separately. "Warmth must be obtained as the first demand of nature, and without it civilization will go back. When men are cold they devote themselves to physical exercise; and if that is impossible, to discomfort, in which the mind refuses to do more than to complain if it cannot forget." A poorly warmed school-room defeats the very object for which a school exists, by preventing all mental activity except grumbling, which needs no special culture.

In my estimation, no ventilation is good which requires the opening of doors and windows at any time. Window ventilation is often used in warm weather, but I consider it undesirable, because it admits insects, dust, hot air; *i. e.*, air hotter than might be secured by properly arranged air-ducts, which may be so contrived as to introduce comparatively cool air. But window ventilation certainly should never be used in cold weather, while the scholars are not taking active exercise. It is never necessary in good ventilation.

Ventilation should, as far as possible, be automatic, and should be beyond the control of every one except the person who has it in charge. This self acting ventilation may best be secured by combining the ventilating system with the warming apparatus, so that the active condition of the warming apparatus shall necessitate an active ventilation; because we are much more sensitive to a change of temperature than we are to the stupefying influence of foul air.

The construction of school-houses in this State is very

faulty, because in the original plan little or no attention is given to ventilation, whereas it is one of the first subjects which should receive consideration. In the original plan it is very easy to provide for good ventilation; but when once the building is erected, it is impossible to introduce good ventilation without greatly disfiguring the building. The air-ducts should be abundant, but should be kept out of sight. The most natural and economical position is the space beneath the floor, between the joists. These can all be connected with the ventilating shaft by having the joists all lead toward the shaft, and the spaces connected with it. But the joists often cut at right angles the line leading through the centre of the room to the ventilating shaft, or beam, which is the principal support of the centre of the floor, prevents all communication with the shaft. These and other considerations show how important it is to provide for the ventilation in the original plan of the building, and not to introduce it as an after thought.

The ventilating shaft should be placed entirely within the building,—in its centre, if practicable. This interior position should be given it, in order to secure so high a temperature in the shaft as to insure motive power enough for ample ventilation by the waste heat of furnace. It should be of sufficient size, but not too large. If too large, there being danger of return currents of cold air by the side of the shaft. The size of shaft may easily be estimated by the rule adopted for ventilation in the British army, viz: ten square inches of sectional space in the shaft for each person. In the centre of this shaft I would place the pipe to convey away the smoke, etc., from furnace, and thus utilize the waste heat to warm the shaft. In order that each room may receive its own share of ventilation, and to prevent the foul air of one room from being driven into another room when high winds prevail, I would divide the shaft space outside the smoke pipe into two or four shafts, by having

two or four plates passing from the whole length of the smoke pipe, radiating till they strike the sides of the shaft. These long vertical plates can be riveted to the sides of the smoke pipe, and at their other edge be imbedded in the brickwork of the shaft, and thus secure two or four shafts equal in size, and each exposed to the same amount of heating surface in the smoke pipe. If properly constructed, these air spaces will not communicate with each other, but be perfectly distinct shafts throughout. It will therefore be impossible for one of these shafts to rob or interfere with the action of another. One of these shafts may be devoted to ventilating one room or floor, and the others may perform a like office for others. Into these ventilating compartments of the main shaft, the foul-air ducts enter at once from the floor level of the room to be ventilated.

The smoke pipe should be of a large size (say 12 to 16 inches in diameter), to insure the perfect removal of smoke and all products of combustion, and also to afford heating surface to the shaft. By a little skill in arrangement it will be easy to heat this central pipe by a small stove in basement in summer, and thus secure good ventilation in the hottest weather without warming the building in the least. The inlet ducts to admit fresh air, whether it is hot or cold, should have same sectional area as the educt pipes for foul air, viz: ten square inches for each person. The practice, altogether too common, is to make these registers for admitting warm air much smaller than I have indicated, and to admit the air at a very high temperature, *i. e.*, a small amount of very hot air instead of a large amount of warm air. The air should never be admitted at a temperature above 75 degrees. These red hot furnaces are an abomination which should never be tolerated in a Christian community. They should be banished to that region where it is said "they don't cover up the fire at night."

You may say that there is but little hope that school

buildings will be so constructed as to secure the abundant ventilation here recommended. Still, I would hold up the ideal, which must become *real* before our schools shall meet the demands of the age. A writer has well said that when the proper and fitting thing to be done is once clearly pointed out, it generally contrives to get itself done in the long run. A proper temperature as the first condition of mental activity, and the removal of carbonic acid, which "lowers the vitality and kills with indefinite warning," are prime conditions for the development of a nation that is yet to rule the world. We have abolished the choking of our worst criminals by the hangman's rope; let us abolish the strangling of the innocent children by viewless ropes of poisoned air.

LOCALIZATION OF THE FUNCTIONS OF THE BRAIN.—We are all agreed, Dr. F. said, that it is with the brain we feel, and think, and will; but whether there are certain parts of the brain devoted to particular manifestations is a subject on which we have only imperfect speculations or data too insufficient for the formation of scientific opinion. The general view is that the brain as a whole subserves mental operations, and that there are no parts specially devoted to any particular functions. This has been recently expressed by so high an authority as Professor Sequard. The idea rests chiefly on the numerous facts of disease with which we are acquainted. There are cases where extensive tracts of brain are destroyed by disease, or removed after a fracture, apparently with no result as regards the mind of the individual. Along with these facts we have others which are very curious, and which hardly seem to agree with this doctrine. One of these is that when a certain part of the brain is diseased, in aphasia, the individual is unable to express himself in words. Other curious phenomena have been well described by Dr. Hughlings-Jackson—viz., that certain tumors or pathological les-

ions in particular parts of the brain give rise, by the irritation which they keep up, to epileptiform convulsions of the whole of one side, or of the arm or leg or of the muscles of the face; and from studying the way in which these convulsions show themselves he was able to localize very accurately the seat of the lesion. The great difficulty in the study of the function of the brain has been in the want of a proper method. When we study the function of a nerve, we make our experiments in two ways. In the first place, we irritate the nerve by scratching or by electricity, or by chemical action, and observe the effect; and in the second place, we cut the nerve, and observe what is lost. In regard to the brain and nervous system, the method has been almost entirely, until recently, the method of section. It has been stated by physiologists that it is impossible to excite the brain into action by any stimulus that may be applied to it, even that of an electric current; they have, therefore, adopted the method of destroying parts of the brain. This method is liable to many fallacies. The brain is such a complex organ that to destroy one part is necessarily to destroy many other parts, and the phenomena are so complex that one cannot attribute their loss to the failure only of the parts which the physiologists have attempted to destroy. About three years ago, two German physiologists, Fritsch and Aitze, by passing galvanic currents through parts of the brains of dogs, obtained various movements of the limbs, such as adduction, flexion, and extension. They thus discovered an important method of research, but they did not pursue their experiments to the extent that they might have done, and perhaps did not exactly appreciate the significance of the facts at which they had arrived.

I was led (said Dr. Ferrier) to the experiments which I shall have to explain by the effects of epilepsy and of chorea, which have been supposed to depend upon irritation of parts of the brain. I endeavoured to imitate

the effects of disease on the lower animals, and determined to adopt the plan of stimulating the parts of the brain by electricity after the manner described by Fritsch and Hitze. I have operated on nearly one hundred animals of all classes—fish, frogs, fowls, pigeons, rats, guineapigs, rabbits, cats, dogs, jackals, and monkeys. The plan was to remove the skull, and keep the animal in a state of comparative insensibility by chloroform. So little was the operation felt that I have known a monkey, with one side of the skull removed, awake out of the state induced by the chloroform, and proceed to catch flies or eat bread and butter. When the animal was exhausted I sometimes gave it a little refreshment, which it took in the midst of the experiments. Referring next to his experiments on cats, Professor Ferrier stated that on applying the electrode to a portion of the superior external convulsion the animal lifted its shoulder and paw (on the opposite side to that stimulated) as if about to walk forward; stimulating other parts of the same convolution, it brought the paw suddenly back, or put out its foot as if to grasp something, or brought forward its hind leg as if about walk, or held back its head as if astonished, or turned it on one side as if looking at something, according to the particular part stimulated. The action produced by stimulating the various parts of the middle external convolution were drawing up of the side of the face, a backward movement of the whiskers, a turning of the head, and a contraction of the pupil respectively. A similar treatment of the lower external convolution produced certain movements of the angles of the mouth; the animal opened the mouth widely, moved its tongue, and uttered loud cries, or mewed in a lively way, sometimes starting up and lashing its tail as if in a furious rage. The stimulation of one part of this convolution caused the animal to screw up its nostrils on the same side; and curiously enough, it was that part which gave off a nerve to the nostril of the

same side. He then explained in like manner the results produced by the stimulation of corresponding or homologous parts of the rat, the rabbit, and the monkey. Acting upon the anterior part of the ascending frontal convolution, the monkey was made to put forward its hand as if about to grasp. Stimulation of other portions acted upon the biceps, or upon the zygomatic muscles. The part that appeared to be connected with the opening of the mouth and the movement of the tongue was homologous to the part affected in man in cases of aphasia. Stimulation of the middle part of the temporo-sphenoidal convolution produced no results; but the lower part of the temporo-sphenoidal, when acted upon, caused the monkey to shut its nostrils. No result was thus obtained in connection with the occipital lobes. These experiments, he said, had an important bearing upon the diagnosis of cerebral disease, and the exact localization of the parts affected. He was able to produce epileptic convulsions in the animals experimented upon, as well as phenomena resembling those of chorea. The experiments were also important anatomically, as indicating points of great significance in reference to the homology of the brain in lower animals and in man, and they likewise served to explain some curious forms of expression common to man and the lower animals. The common tendency, when any strong exertion is made with the right hand, to retract the angle of the mouth and open the mouth on the same side, has been stated by Oken, in his *Natur-Geschichte*, to be due to the homology between the upper limbs and the upper jaw; the true explanation being that the movements of the first of the mouth are in such close relation to each other that when one is made to act powerfully the impression diffuses itself to the other parts of the brain, so that the two act together. The experiments had also a psychological significance. There was reason to believe that when the different parts of the brain

were stimulated, ideas were excited in the animals experimented upon, but it was difficult to say what the ideas were. There was, no doubt, a close relation between muscular movements and certain ideas which would prove capable of explanation. This was supported by the phenomena of epileptic insanity. The most important guide on the psychological aspect of the question was the disease known as aphasia. The part of the brain which was the seat of the memory words was that which governed the movements of the mouth and the tongue. In aphasia the disease was generally on the left side of the brain, in the posterior part of the inferior frontal convolution, and it was generally associated with paralysis of the right hand; and the reason might be supposed to be that the part of the brain affected was nearly related to the part governing the movements of the right hand. It was essential to remember that the movements of the mouth were governed bilaterally from each hemisphere. The brain was symmetrical, and he held it to be a mistake to suppose that the faculty of speech was localized on the left side of the brain. The reason why an individual lost his speech when the left side of the brain was diseased was simply this: most persons were right-handed, and therefore left-brained, the left side of the brain governing the right side of the body. Men naturally seized a thing with the right hand, and they naturally therefore used rather the left side of the brain than the right, and when there was disease there the individual felt like one who had suddenly lost the use of his right arm. After describing some further experiments on pigeons, Professor Ferrier alluded to the results of stimulating the different ganglia. Stimulation of the corpora striata caused the limbs to be flexed; of the optic thalami produced no result; of the corpora quadrigemina produced when the anterior tubercles were acted upon, an intense dilation of the pupil, and a tendency to draw back the head and extend the

limbs as an episthotonos; while the stimulation of the posterior tubercles led to the production of all kinds of noises. By stimulating the cerebellum various movements of the eyeballs were produced.

MIGRATION OF WHITE CORPUSCLES.—Dr. Thomas read before the German Association of Naturalists at Weisbaden, a paper on the migration of white corpuscles into the lymphatics of the tongue of the frog. He injected the lymphatics of the living animal with an extremely dilute solution, not containing more than from 1-2000th to 1-8000th part of nitrate of silver, and found that, with certain precautions, this did not lead to stasis of the blood in blood-vessels, but only to a lively exodus of the white corpuscles from their interior. After the lapse of some time, when the parts had begun to recover from the injurious effects of the injection, he was able to observe the re-entrance of the corpuscles into the lymphatic vessels through certain stomata in their walls, now marked and rendered distinct by a precipitate of the silver salt. In a second series of researches the lymphatics were injected with a dilute emulsion of cinnabar in a three-quarter per cent. solution of common salt. The cinnabar was in part deposited in the stomata of the lymphatics, and partly passed through them, and was deposited in the tissues in the form of small, round cloudy patches. The evidence of the identity of the stomata brought into view by means of cinnabar, with those rendered apparant by means of nitrate silver is obtained by observing their peculiar grouping, and by the subsequent injection of nitrate of silver into the same vessels. The injection of cinnabar causes very little disturbance of the circulation. If a lively exodus of the white corpuscles from the blood-vessels be produced by making an abrasion of the surface, the migrating cells quickly make their appearance in the stomata of the lymphatics marked out by the cinnabar. They then take up the particles of cinnabar into their interior,

which causes them to lose their activity, and accumulate in the stomata. They then appear in the form of cauliflower excrescences projecting into the interior of the lymphatics, which gradually break up into their constituent cinnabar-holding cells. These may be traced into the larger vessels, and from thence into the blood. In these researches a remarkable regularity or uniformity in the track pursued by the white corpuscles was observed. They pass away from the blood-vessels nearly at right angles into the tissues, their course, however, in a series of short zigzags. They all appear to travel at about the same pace.—*Lancet*, October 25, 1873.

CAUTERIZATION OF THE UTERINE CAVITY.—We transcribe the following from the *Lyon Medical* for December, 1873:—

Dr. Blanchard (thèse pour le doctorat, par M. Joseph Blanchard, Paris, 1873) belongs to the school of those gynecologists, who in uterine affections attribute much to the body of the womb. He does not admit with Bennet that metritis of the neck is the rule and metritis of the body the exception. He shows on the contrary that the inflammation, fungosits, and ulcerations are most ordinarily found in the muscous membrane which lines the cavity of the body. Threapeutic means addressed only to the lesion of the neck are completely insufficient. The disease must be followed to the superior orifice of the crevical cavity.

Among the means to this end, M. Blanchard has specially studied astringent and caustic injections, painting the internal face of the body by means of a brush dipped in nitrate of silver or other solutions, and above all by means of medicated pencils introduced into the womb. Among injections he mentions those made with decoction of oak bark, tincture of iodine in water, iodide of iron, perchloride of iron and glycerine. The author says that after this practice he has unhappily seen a certain number of cases of peritonitis develop. These ac-

cidents are not due to the passage of some of the injection into the tubes. The experiments of Vidal de Cassis, of Klemm, Petit, and Astros, have shown that the penetration of the injection into the peritoneal cavity is nearly impossible in the conditions in which intra-uterine injections are made. The peritonitis is due to the presence of a peri-uterine inflammatory centre, which is lighted up by the impression produced on the uterine mucous membrane. One is protected from such accidents by carefully exploring before the operation all the points of the true pelvis, and by abstaining every time one discovers the least trace of peri-uterine inflammation. That is a formal contra-indication, which, moreover, is common to two other means of medication which Dr. Blanchard passes in review.

Painting the uterine mucous membrane is done by means of a canula which is placed in the cervical cavity, and through which the brush is passed.

M. Nonat and M. Courty are able in this way to paint the whole cavity of the uterus with astringent or caustic solutions, tincture of iodine, or nitrate of silver.

The introduction of medicated pencils into the uterine cavity has most particularly fixed the attention of M. Blanchard. M. M. Becquerel and Rodier have employed long pencils composed of gum tragacanth, mixed with alum, sulphate of copper, sulphate of zinc, or tannin. This last substance alone has given good results.

Recourses has been had to pencils of nitrate of silver. But the caustic which M. Blanchard prefers is a mixture of nitrate of silver and nitrate of potash. These are the pencils which he has seen used in the service of M. Laroyenne. He describes with care the operative proceeding, precautions and contra-indications of this method of treatment, relates six cases of cure obtained in case of chronic metritis, and terminates his interesting work by the following conclusions:—

1. Introduced into the uterine cavity, the pencil of

nitrate of silver and potash is a completely inoffensive agent.

2. It may be left in the cavity if it be necessary to profoundly modify the mucous membrane.

3. Its employment is formally contra-indicated in all inflammatory states of the uterine annexes, or adjacent tissues.

4. Its application has been followed by cure in cases of abundant leucorrhea, chronic metritis of a hemorrhagic character, and occlusion of the internal orifice of the neck with retention of the secretions.

5. In the case of metritis developed under the influence of a fibroma or deviation of the uterus, it gives marked ease, and often causes the disappearance of the greater part of the symptoms; but not acting on the cause, it does not save the patient from relapses.—*British Obstetric Journal.*

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ALCOHOLIC LIQUORS AS A MEDICINE.

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Read before the Hendricks County Medical Society.

The use of alcoholic liquors as a remedial agent is recognised by all our medical writers, and enters very generally, perhaps too generally, into the prescriptions of our best practitioners of medicine; and yet, while the profession has been disposed to scrutinize the therapeutic action of most other prominent remedies, I believe it may be said that our views of the *modus operandi* of this class has, as a general thing, been vague and indefinite; and from the disposition to generalize, we have too often yielded our ascent to, if we have not actually prescribed an alcoholic treatment that might jeopardize the moral status of the patient by producing a disease a thousand fold worse than the one we sought to cure. Whether we recognise the fact or not, it is nevertheless true that the medical profession is very largely responsible for the moral and social degradation and wretchedness resulting from the use, or I might rather say, the abuse of alcoholic liquors. In order, as I think, to form

correct and well defined views of the action of alcohol in disease, it is necessary to inquire into its behavior on the healthy system, and in the prosecution of this inquiry for a short time, you will indulge me in what may perhaps be considered rather a tedious recurrence to first principles; and before doing so, I wish to premise the statement, that alcohol acts on the blood in a certain sense as a cathartic—interrupting that normal process in the blood that is necessary to elaborate the nutriment of the various tissues, which will appear hereafter, and that always, and in all quantities, its action is unfriendly to the vital action of the system, and should always be administered therapeutically, as the least of two evils—and here the physician is called upon to exercise an enlightened judgment.

If a cup of blood drawn from the arm of a healthy man be permitted to stand a few minutes, it separates into a solid and fluid part, called respectively crassamentum and serum, and if it be stirred with a stick while cooling, there adheres to it a flocculent, stringy substance which is fibrine. Now both these parts of the blood, though differing so widely in appearance, are chemically the same, and are composed almost exclusively of albumen, with traces of sulphur, soda, phosphorus, etc. In the order of growth, the serum passes into crassamentum, crassamentum into fibrine, and fibrine into the muscular and other organized tissues of the body, being transported to its place of lodgement by the circulation.

The red globules do not enter into the composition of tissue. Their use is not fully understood, but they are regarded as carriers of oxygen. Now, the nitrogenized principles of our food, derived from the vegetable kingdom, are called vegetable albumen and vegetable fibrine, and are identical in chemical composition with the albumen and fibrine of the blood, and of course identical with the composition of the tissues of the body. The oxygen, nitrogen, carbon and hydrogen composing those

tissues are supplied to the system through the food in exactly the proportion to form the tissues, and no part of the oxygen and nitrogen taken into the body through the lungs and skin, or the oxygen and hydrogen of the water we drink, goes to make up any part of the organized tissue. The oxygen, being carried to all parts of the body by the circulation, is used exclusively in the metamorphosis of the old tissues by chemically uniting with their elements the carbon of those tissues; now carbonic acid re-enters the circulation, and passes off through the lungs, while the nitrogenized principle passes off through the kidneys in the shape of urate of ammonia or urea. The hydrogen, by combining with the free oxygen of the blood, may either remain in the shape of fat, or by combining with the same element in a different proportion, to form water, be thrown out through the lungs and skin as vapor or sweat. The nitrogen taken in through the lungs in respiration is known to pass out in the same way unchanged. These never ceasing chemical changes going on in the body are the sources of animal heat.

It is especially to be observed that in the normal state the oxygen taken in through the lungs never combines, chemically, with other elements in the blood, either in the arteries or veins, but is absorbed by the red corpuscles, and carried onward to combine chemically with the elements of the tissues, preparatory to their being carried out of the body as effete matter, through the circulation. Any agent, therefore, which, being introduced into the circulation, would tend to disturb this order, by combining chemically in the blood with part of the oxygen that was on its way to be used by the tissues, is subversive of the established order of nature, and sooner or later must result in disease and death.

Alcohol in any of its combinations, when taken into the stomach, if sufficiently diluted, is readily absorbed and carried into the circulation. Its first sensible effect

is on the brain and nervous system, producing exhilaration of spirits, with unusual animation, and incoherency of thought; a sensation of warmth about the face, throat and stomach, increased frequency of the pulse, which, after a few hours, falls below the normal standard. The quantity of carbonic acid gas exhaled from the lungs is always diminished, and, according to a series of experiments very carefully conducted by Prof. Davis of Chicago, the temperature of the body is not only not increased, but is slightly and constantly diminished.

This last effect, though I think fairly proven by Prof. Davis, is not in accordance with the received opinion of the profession; this opinion being formed from the sensation produced on the subject, rather than a philosophical examination of the fact, and as the brain and nervous system of one under alcoholic influence is in an abnormal state, his impressions are no more reliable as to fact than one under the influence of chloroform, or many of the nervous diseases with which every physician is familiar. If the experiments of Prof. Davis should be verified by others, the principal plea for the therapeutic use of spiritous liquors by the profession would be swept away.

As to the specific alteration in the blood which takes place, when mixed with alcohol in the circulation, authorities are not agreed. Liebig says: "The oxygen of the arterial blood, which in the absence of alcohol, would have combined with the matter of the tissues, or with that formed by the metamorphosis of the tissues, now combines with the elements of alcohol—the arterial blood becomes venous, without the substance of the muscles taking any share in the transformation." Liebig therefore regards the change as a chemical union between the inspired or free oxygen of the blood, and the carbon of the alcohol; but with this view, it would seem that the expired carbonic acid should remain the same as in the normal state, and not be diminished, as all

agree that it is. Others suppose the union to be between the oxygen of the blood and the hydrogen of the alcohol, in the proportion to form water, which is expired as vapor from the lungs. Dueheck attributes the change to the formation of aldehyde in the blood, which absorbs oxygen rapidly, by which it is converted into oxalic acid. But whatever may be the explanation of the change, we know that free oxygen is abstracted from the arterial blood on its way to the tissues, or rather enters into chemical combination on its passage, in proportion to the amount of alcohol present, and that the metamorphosis of tissue is correspondingly retarded, and as the exhalation of carbonic acid from the lungs is diminished, its quantity retained in the circulation is relatively increased, the lips and finger nails, as well as the skin, generally have a leaden, blueish tinge, which, if the poison is discontinued, gradually gives way, and the parts recover their natural appearance; or, on the other hand, if it be continued, the blood ceases to afford the stimulus to the medulla oblongata necessary to sustain involuntary action, and the heart stops. The man dies in a condition resembling apoplexy, or of asphyxia from carbonic acid gas.

There is an impression, widely prevalent among medical men, that alcoholic liquors, when taken regularly and persistently, act as a prophylactic against pulmonary consumption, by *affording fuel to the lungs*, or in other words, by supplying the amount of carbon in the alcohol that is demanded by the oxygen from the lungs to sustain animal heat. In this way, it has been supposed the carbon of the alcohol would bear off the free oxygen of the blood, and thereby shield the tissues from a super action of oxygen, which was supposed to favor the deposition of tuberculous matter.

It will be remembered by some of you that a few years ago Dr. Ritter presented this society with a very ingeniously written paper taking this view, in which he un-

dertook to prove that a carbonized condition of the blood was incompatible with the formation of tuberculous matter in the system, and that whisky and cod liver oil cured consumption, by supplying the necessary amount of carbon; but unfortunately for this theory, the next number of the *American Journal of Medical Sciences* reported the death of a young man in Philadelphia from congenital cyanosis, whose lungs were full of tubercles. Though this case absolutely disproves the theory, yet we believe the latter stages of tuberculous consumption affords one of those rare conditions of the system in which the use of whisky may serve to lengthen out the term of life. At this stage of the disease, the tissues are being rapidly consumed by the oxygen, divided through the lungs, and the peculiar property of alcohol, by which it combines with the blood in the arteries, before it reaches the tissues, and which in the normal state is destructive of life, is, under these circumstances, the kind of action necessary to sustain it.

That alcohol impairs the healthy nutritive action of the stomach is apparent from the following considerations: According to Liebig's estimate, the capillary vessels of that organ will absorb something more than three times as much water as they will alcohol, it therefore follows as a consequence that when alcohol is taken into the stomach and absorbed, as it will be if not too concentrated, the alcoholic liquor occupying only one third the space the fluids of the tissues did, a contraction and corrugation of the walls of the stomach is the result, and to a greater or less extent, according to the concentration of the alcohol, will coagulate the soluble albumen contained within its walls, so as greatly to impede the ingress of the gastric fluid, and, of course, the digestive powers of the stomach. The experiments of Dr. Pearey prove, that when an animal is poisoned with alcohol, the whole coats of the stomach throughout their

entire thickness become so imbued with coagulated albumen that no washing or maseration can remove it.

This extreme condition does not of course follow the use of more diluted alcoholic liquors, but something of the kind does always attend their use, affecting the membranes of the stomach to a greater or less extent, according to their concentration; and even after the absorbed alcohol passes into the circulation, though it can not be supposed to be sufficiently concentrated to coagulate the serum of the blood, yet its presence in the blood is known to interfere with that arrangement of the serum that is necessary to its conversion into fibrine, and ultimately into the tissues of the body. Dilute alcohol injected into the blood destroys its capacity to coagulate, and it remains fluid after cooling.

From the foregoing considerations it will be seen that, in the healthy system, the very sources of life are invaded by the introduction of alcoholic liquors into the stomach; first, by impairing the digestive efficiency of that organ, so that the proper amount of nutrition from the food does not reach the circulation, and secondly, by so interrupting the changes in the blood, necessary to the formation of tissue, as to impair the energy of their functions. Every observing practitioner of medicine is aware that the habitual drinker recovers with difficulty from severe wounds, or from fevers, and is always the first to fall in epidemics. It may, perhaps, be considered invidious to speak of the habitual drinker, or toper, in the same category with one who uses it prudently or medicinally, to improve the appetite or aid digestion—the difference is in degree, and not in the mode of its action, both tending towards disorganization; carbonization taking place in the blood and not in the tissues, as it should do; the vaso-motor nerves receive the impression, and the frequency but not the force of the heart's action is increased for a time, but is always followed by depression, and the ultimate effect is, weak-

ened action of the heart from diminished nutrition, especially of the nervous tissue. Like the speculator whose finances are in a precarious condition, borrowing at a ruinous per cent. may afford temporary relief, but each repetition only precipitates his certain failure. How often do we meet with persons in feeble health, of a delicate nervous temperament, who had been induced to use alcoholic stimulants as a remedy, and who, deceived by the temporary comfort derived from them, even with the appetite fading away, and the energies of the system gone, will tell you with all sincerity that they were kept alive by brandy, that they could not live without it; and so perfectly are they assured of this, that they are only induced to give it up with the most gloomy forebodings, yet the experiment always results in improved appetite and vigor.

But sometimes we are called upon to chose between two evils. We give tartarized antimony to relieve an overloaded stomach, or to discharge a poison, or calomel to counteract syphilitic virus, and so I think we should use alcoholic liquors with the same caution and discrimination.

One of the conditions requiring its use has already been noticed—that of tuberculous consumption, in the latter stages of which the oxygen of the inspired air has removed all the fat from the body, and will continue to remove the muscles, nerves and other tissues in the same way. This process may be retarded by the free use of alcohol, which shields the tissues by combining with the oxygen before it reaches them.

Again, in cases of severe and sudden shock to the nervous system, when it is doubtful whether reaction will follow, or if it should, whether it would be sustained without assistance. We meet with such results from a fall, a severe burn, or scald, etc. In such instances the prompt use of alcohol, for the time being, will generally be followed by good results. By its action on

the ganglionic nerves the heart is kept in motion, when otherwise it might stop. But in those cases the operating cause is temporary, and if the vital powers can be sustained for a few hours, till the forces of nature resume their control, the object is attained, and life is preserved. A similar condition may occur in the congestive chills of the country. These are only a few of the many cases in which alcoholic stimulants may be advantageously employed to procure a quick and temporary action. But it is in diseases of a more lingering character, and where the remedy is required to be continued for a length of time, that the physician is called upon to exercise a larger responsibility. There is high authority for the use of alcohol in some of the forms of fever, and there may be conditions in all fevers in which its discriminative use might be advantageous, but it has been especially recommended in typhoid fevers; and before proceeding to notice the particular circumstances under which it is recommended, permit me to suggest some general principles in reference to its action, which, if well founded, may serve as landmarks, not only in typhoid, but in other conditions of disease. A man of ordinary size is estimated to have twenty-four pounds of blood, four-fifths of which, or 80 per cent. is water, the remainder, with the exception of a few salts, (which make but a small part of the weight) is albumen. This albumen, which ultimate analyses proves to be principally of carbon, can not be made in the body, but is found ready prepared both in vegetable and animal food, in just the proportion for the formation of the organized parts of the body; by a constant process, the blood is passing from a fluid state into the solid, organized parts of the system, while its water is given off through the lungs and skin principally as vapor; and this change is estimated to take place at such rate as to dispose of the whole amount of blood (twenty-four pounds) in about three and a quarter days, which deficit must of course

be supplied as it occurs through the stomach. Now as the weight of the individual remains unchanged, at the end of the year, notwithstanding this large and constant supply, it is a matter of curious interest to trace out the process by which the waste of the body is effected that is necessary to sustain an equilibrium. This is effected by the action of oxygen received through the lungs. As there can be no metamorphosis of tissue, without its combination with oxygen, so there can be no combination with oxygen without disgorgement of heat, and in the healthy action of the system oxygen is carried by the blood through all the capillary vessels, combines with the carbon of the organization, and sustains animal heat at its normal standard. In this way the ordinary consumption of carbon would demand a fraction over thirteen ounces per day of oxygen, the amount necessary for its combustion. The heat thus disengaged is necessary to sustain the vital action of the nervous system in its normal state, and while resistance offered by this system is sufficiently strong to oppose any disturbing cause—in other words, while the waste and supply remain undisturbed, and equal, healthy action is perfect. Disease may therefore be said to be, a disturbance of the equilibrium of waste and supply of the system, by which the vital force of the nerves becomes unable to resist chemical action on the tissues, and the result of this increased chemical action is increased waste or metamorphosis of tissue, and increased metamorphosis implies increased temperature, and increased temperature implies increased circulation, and increased temperature and circulation is fever.

In order to be as definite as possible, we will fix our minds on the typhoid type of fever, and it matters not for the present purpose what may be the nature of the operating poison in this disease, we know that the effect is to weaken the nervous force to such extent that it can not rally, as from a shock, and resume its former status,

but the effect of the poison, whatever it may be, is persistent. The continued chemical action between the oxygen of the lungs and the carbon and hydrogen of the fat and tissues, produces febrile action, that is sustained till those elements are burned out and life is surrendered, or the resistance offered by the nervous system to the encroachment of the poison is relatively increased, and that equilibrium is restored which is the condition of health.

That alcohol is a valuable remedy in the treatment of typhoid fever, physicians generally agree; the only question of difference is as to the period of the disease at which its use should be commenced. Sir William Stokes has fixed a standard beyond which he does not think it safe to defer its administration, that is, in the progress of the disease to carefully watch the force of the heart's action, and when it becomes so feeble that its diastolic sound can not be heard, or at least very feebly distinguished, then we should begin to sustain with alcohol. This fixed standard may serve very well as a landmark to one who does not feel competent to anticipate that condition by a general prognosis, but we think is too late to secure the full benefit of the remedy. When the heart acts so feebly that the diastolic sound is lost, there is comparatively not much carbon or hydrogen left in the system to sustain animal heat. If alcohol acts in typhoid fever as we think it does in tuberculosis, by absorbing the oxygen of the blood to a greater or less extent, and thereby shielding the tissues from too rapid oxydation, we can readily understand how life may be sustained for a much longer time, and till the force of the poison becomes exhausted.

What I have said of alcoholic liquors in typhoid fever would of course be applicable to all other forms of fever, as other common remedies are applicable, under the discriminating judgment of the physician; but there is another class of diseases which we meet with almost

daily in which those liquors are freely prescribed, generally, but not always, in a medicated form, which, if the foregoing view of their *modus operandi* be correct, are not only of no permanent use as a remedy, but are ultimately injurious; not tending to produce a permanent cure, but often, by long continued use, leave a demand for an artificial stimulant much more to be deplored than the original disease. I refer to those cases of extreme inervation, generally traceable to faulty digestion, preceded by a low grade of chronic gastritis, and characterized by extreme debility, languid appearance, weak, slow pulse, unless quickened by some temporary mental excitement, with the trains of nervous symptoms usually called hysterical, which are generally felt by delicate females, but are not peculiar to that sex. And sometimes we are called upon to prescribe in a low state of the vital powers, when a careful examination detects no disease, the trouble being the result of a feeble rather than a diseased action. In all the various phases of this class, whether they are prominently characterized by dyspepsia or not, alcohol, in some shape, almost always enters into the prescription, and the unanimity with which this practice is endorsed, both by physicians and patients, may be, I think, accounted for in the fact that the first effects are generally followed by temporary relief, which gives hope of continued progress towards restored health. But this relief is only apparent—each dose is followed by the like favorable results but in diminished degree—the excitement being less after each repetition, (unless the dose be increased), while the resulting depression is also correspondingly increased. The power of assimilation is constantly waiving as a result of the remedy. With each repetition the circle of vitality is contracting, until nature, like the flicker of an expiring lamp, is contracted to a point. She has borrowed from herself till her last energies are exhausted and life is extinct.

THE BEST DOCTOR IN THE WORLD.

BY N. FIELD, M. D., JEFFERSONVILLE, IND.

The All-wise Creator has constituted and appointed one physician for the whole animal kingdom, without whose assistance no disease could be cured, or injuries of living bodies repaired. All our medications and surgical operations, would be unsuccessful and useless, without the co-operation of this universal and time-honored colleague in the healing art. As his age and experience are co-eval with creation, he is entitled to unbounded confidence. The sun never sets upon the domain of his practice. Day and night he is at work, with matchless skill and assiduity, in the work of restoration and reparation of that which is injured by disease or destroyed by accident. He never sleeps or rests from his ordinary duties. His knowledge of the animal economy, its normal condition, and morbid disturbances, is so thorough and profound, that he never makes a mistake in diagnosis. He invariably comprehends the case and prescribes for it with infallible certainty. All his remedies are in perfect harmony with the laws of life, and the functions of the various organs and tissues of the human frame. He cures more diseases than all the physicians in the world. The combined wisdom of the entire medical profession in the four quarters of the globe, is not equal to his. Hence, he should be consulted, and his suggestions respectfully considered, in every disease demanding medical treatment.

The most successful practitioners of medicine, are those who confide most in his counsels. He is modest and unostentatious in his recommendations. He never boasts of his skill or success in restoring millions to health; but silently performs the duties of his divine mission, and gives all the honor and glory of his clinical achievements to Him who commissioned him. He claims no credit nor does he receive any remuneration

for his services. He is a disinterested philanthropist, and works for the satisfaction of doing good. His office is the laboratory of nature, and his residence is in every living substance. He is in other words a cosmopolite, subsisting without expense to himself or friends. He never advertises for business or hangs out a sign; and yet he is occupied continually in ministering to human suffering, and endeavoring to save life. He deals in no empirical remedies, or doubtful modes of practice, neither does he ever try experiments. His method of treating diseases is the same now that it was six thousand years ago. He was present when man was formed from the dust of the ground, and became a living being. From that time to the days of Hyppocrates, he was without a competitor or auxillary in the medical profession. Under his treatment people lived to a great age. Longevity was very common, reaching to many centuries. They generally died of old age; and would still die from the same cause, were it not that he is regarded as an old fogie, and his advice contemned. Whisky, debauchery, and excesses of all kinds, have interfered with his operations and made it difficult, and in many cases impossible for him to preserve health. His opinions are regarded as being behind the times, and his hygienic rules and remedies entirely obsolete. But few now-a-days consult with him or believe much in his tardy and mysterious plan of curing diseases. His fame is evidently on the decline; and therefore, he is but little respected, and is often rudely treated and thrust out of the way by some youthful and inexperienced disciple of Esculapeus.

The great complaint against him is, that he does not do enough. In a difficult case, instead of resorting to a half dozen different systems of practice, and giving about 2,000 medicines, he adheres to his old ideas and gives no medicine at all! When he has exclusive control of a case, though it may prove fatal, he nevertheless perseveres to the last. He often needs assistance and

thankfully accepts it; for he does not claim to be omnipotent nor pretend to work miracles. Aid, timeously and judiciously afforded him will often abridge the duration of disease. While he cures without medicine, still, medicine wisely administered will accelerate recovery. Though not always successful, he has the consolation of knowing that he understood the disease and treated it correctly.

Let all the junior members of the medical profession cultivate the acquaintance of this illustrious colleague. He is known in the kingdom of nature as Doctor *Vis Medicatrix Naturæ*.

But to change the figurative to the literal, I would remark, that it is known to all mankind, civilized and savage, that there is within every living body a principle of inherent power or vital force, operating for the preservation of the living organism from disease and death. It is what Stahl calls the divinity that stirs within us. It is the *instinct* of some physiologists, possessed by vegetables as well as animals, whose movements and impulses are for the supply of food, the removal of opposing obstacles, and to repair injuries. Of its cause and nature we know no more than we do of the cause and nature of gravitation or magnetism. It is governed by its laws, which it implicitly obeys in all its mysterious operations, uniformly and perseveringly aiming for one single object, the preservation of health and reproduction of the living frame. This is done by carrying off the waste or worn out matter of the body, supplying it with new and suggesting the mode of cure, and accomplishes it in innumerable instances without the aid of human skill.

The young physician would do well to place great reliance on this principle of reparation; to be sparing in the use of drugs, lest he embarrass this power on which so much depends. The closest attention should be paid to the indications of cure, and medicines should be administered accordingly. And if there is any doubt with

regard to either the nature or seat of the disease, as is often the case in its early stage, it is much safer to wait for developments than to administer hypothetically. As a general rule, in diseases of considerable obscurity, no harm can result from delay.

In well marked and violent forms of disease, there is but little uncertainty in either diagnosis or treatment. The common error of young practitioners of medicine, is too much medication. The impatience of the patient himself, and his friends, has its influence on the attending physician, prompting him to the imprudent use of medicine or instability in treatment. This anxious state of mind on the part of all concerned, lest the patient should die, drives the young doctor to ignore the *vis medicatrix*, and to do too much. One of the greatest difficulties of his professional life will be to oppose human folly, ignorance, and prejudice, while waiting on the slow operation of medicine and the *vis medicatrix*. With manly courage he must coolly pursue the course his judgment dictates, and sternly rebuke the clamor that will sometimes be raised against him for not performing a miracle.

The illiterate portion of mankind have far greater confidence in medicine than the learned physician. They expect medicine to do every thing and nature nothing. Hence, when a sick man dies, the inference with them is, that he either died for the want of more medicine or from the administration of the wrong kind. In their opinion medicine, however inert and harmless, always kills or cures. It is a common inquiry with some people when they hear of a death in the neighborhood, "what doctor attended the unlucky man or woman." This very question implies the idea that death from a spell of sickness is the result of ignorance or malpractice. Any new or alarming symptom which may arise in the progress of disease, is more apt to be attributed to medicine than to natural causes.

The fact is the majority of mankind have no faith

whatever in the natural powers of the human constitution. Medicine is everything. The rapid multiplication of medicines, and the vast quantities of patent nostrums annually sold to the people, shows how credulous they are. Millions of dollars are spent every year in our own country for nostrums of which nothing is known beyond a lying advertisement. These nostrums are swallowed without knowing whether they are adapted to the disease or not.

In view of the foregoing facts and considerations, I am candidly of the opinion that our *Materia Medica*s need important reforms. We have too many medicines most of which are entirely useless. For example, instead of a hundred cathartics, a few of the best should be selected and the rest dispensed with and allowed to go into oblivion. There are in the vegetable kingdom hundreds of substances possessing astringent properties, but as tannic acid is the base of them all, we can reduce that class of medicines to one. The per-sulphate of iron in the mineral kingdom, with a few others of less potency, will answer all the demands of surgery. Opium and its salts, and a few non-astringent extracts, such as belladonna, hyosciamus, &c., will be all sufficient as narcotics. And so we could go on curtailing the number of emetics, tonics, diuretics, etc. A few medicinal agents well selected and judiciously administered, singly or in combination, by skillful hands, will achieve all that can be reasonably expected from medicine in aid of the operations of the *vis medicatrix naturæ*.

It is not the quantity of medicine but the judgment with which it is prescribed, that relieves pain and cures disease. The constitution and idiosyncracies of the patient, his habits, the character of the disease, and other circumstances connected with it, must furnish material for reflection and guide the judgment of the physician, and decide the question—what remedies shall be adopted, how long shall they be continued, and how

often, and in what quantity shall they be administered? And in all his ministrations let it be his purpose to aid, and not embarrass nature, in her efforts to throw off the disease. Give her a fair chance, strengthen her in her contest with disease and death, and victory will generally be the result.

Ophthalmology and Otology.

BY DR. C. E. WRIGHT, INDIANAPOLIS.

NASAL DOUCHE IN AURAL DISEASE.—Having so strenuously advocated the use of the nasal douche in the treatment of diseases of the nasal passages, and having by precept and practice urged its employment as therapeutical means in certain aural affections, I deem it no more than a duty to report an unfortunate case in my own practice.

I have already reported, in this Journal, a case of purulent otitis media, occurring in a patient under the care of another practitioner, where the patient, contrary to advice, employed *cold* salted water; but the case I now refer to was, at the time of the accident, being treated by myself, and a warm saline solution was being used.

A bookkeeper, aged 35, had for about one year been troubled with tinnitus aurium, associated with deafness in left ear. The deafness was so complete that he was unable to hear the ticking of an ordinary house-clock. Vertigo was an occasional symptom, and this, with an increasing dullness of hearing in right ear, led him to seek relief.

My watch (which is heard by a normal ear at a distance of about seven feet) was not heard at all by the left ear, and only when placed within six inches of the right

side of the head. A vibrating tuning fork placed upon the vertex was heard better with the left ear.

Objective examination revealed the presence of a plug of hardened cerumen in each meatus, preventing a view of either membrana tympani. These plugs, after prolonged syringing with warm water, were completely removed and the hearing power, tested with the watch, advanced to five feet in right ear and contact in the left.

The right membrana tympani appeared normal but slightly reddened by the syringing. Left drum was abnormally concave, and slightly thickened from irritation caused by pressure upon it by the plug of cerumen.

After catheterization the hearing power was still further increased in both ears. Right, six feet; left, 18 inches, the tuning fork still being heard better in the left ear, but the difference not so marked as before the syringing.

Frequently do we see epithelial casts of the meatus and drum-head remain after removing plugs of hardened wax from the ears, and until these casts are removed from the membrana tympani, the hearing power will be more or less impaired. If we attempt to rid the ear of the presence of these casts, immediately, by the use of forceps, we will only partially succeed, owing to the brittle character of their composition; neither do we succeed any better with the syringe, the use of which will become quite painful to the patient before the flakes are detached. But if we will direct that a little oil, previously warmed, be dropped into the ear each day for a few days, the casts become loosened, and can then be easily removed by syringing, without exciting any unpleasant complication, such as otitis externa, which nearly always follows too vigorous attempts at extraction.

The above course was pursued in the case being reported and in a week after, the watch was heard at a distance of six feet from the right ear, and four and one-

half feet from the left ear, the membrana tympani in each ear being normal in appearance.

The patient was then discharged, being perfectly free from symptoms of aural disease, and without any perceptible deafness requiring treatment, although, as will be perceived, he did not hear the watch when held seven feet from the ears.

About two weeks from the time he was pronounced well, this gentleman was seized with an acute attack of influenza, which has prevailed in this city and its environs somewhat in the form of an epidemic, during the late winter. While recovering from the influenza, and while the discharge from the nose was still greenish, tough, and muco-purulent in character, the nasal douche was employed by myself in treating the case at my office. The patient was directed to lean forward over a basin, the tongue to be protruded from the widely-opened mouth. The bottom of the bottle was held about on a level with the upper part of patient's head, so that only a moderate degree of pressure was employed. The fluid used was a solution of salt; one teaspoonful to half a doucheful (about one pint) of warm water, of the temperature of the blood.

No unpleasant symptoms whatever followed the first employment of the douche, and the patient felt very much relieved after its use.

Two evenings afterwards he voluntarily applied to have the nasal cavities again cleansed. Precisely the same precautions, and a similar solution (warm salted water) were used.

After first passing the fluid into the left nostril the stream was stopped, the nose cleared, and the nozzle was introduced into the right nostril. Scarcely had the stream commenced flowing from the left nostril than the patient experienced severe pain in the left ear, removed the nozzle of the instrument and exclaimed that the ear was full of water. Immediately, I examined the ear

and found the handle of the malleus prominent, and the vessels running along it enlarged and congested, the triangular spot of light wanting, and the whole membrane changed to a bluish tint. The watch was heard only at contact.

The catheter and Politzer's apparatus were then employed very carefully, while the head was inclined to the right side, and the pain was lessened in intensity.

For the succeeding four days the history of the case is one of purulent aural catarrh, ending with perforation, paracentesis not being allowed. The patient was confined to his room for about a week; and the discharge ceased, under treatment, in about three weeks, the perforation healing. Hearing distance, tested with the watch, at present thirty inches.

I have recorded this case thus fully, for the reason that I think the aural disease may fairly be attributed to the use of the douche, and because this instrument is now in such common use, being employed by those entirely ignorant of the dangerous consequences that may result from employing it in an improper manner, and without using the required precautions.

Where patients are allowed to employ the douche at their homes, I have nearly always found, upon inquiry, that they place the instrument at too great an elevation, (usually upon the mantel), and thereby give the stream too great force of flow.

Dr. Roosa, who has analyzed sixteen cases of aural disease, caused by the use of the nasal douche, says, Dr. Frank recommends that "the stream be a powerful one."

The cases compiled by Dr. Roosa, have been reported by him in the *Archives of Ophthalmology and Otology*, (Vol. III., No. 1), and a perusal of them can but tend to make us more careful in the use of the nasal douche, which may after all prove to be a dangerous invention.

Of late I have made less frequent use of the douche, for a reason aside from danger. Although there is cer-

tainly in the majority of instances, considerable relief afforded by the mere cleansing of the nasal cavities, yet it is usually only temporary, and is followed generally by an increased discharge. The abundant mucous flow caused by the douche, will continue for some time after ceasing to employ it, and is an objection I have long noticed.

Very young and very timid persons should not be allowed to use the nasal douche at all, owing to the greater danger of causing aural complaints. They may easily become frightened, swallow, and thus allow the fluid to enter the ears. Besides, in children, the eustachian tubes are more permeable than in adults.

Proceedings of Societies.

INDIANAPOLIS ACADEMY OF MEDICINE.

INDIANAPOLIS, IND., Jan. 7, 1873.

Academy was called to order by the President, Dr. Thad. M. Stevens.

Minutes of previous meeting were read and approved. On roll call the following members reported present: Drs. Bigelow, Collins, Davis, Featherston, Hadley, Stevens, Todd, Tomlinson, Thompson, Van Vorhis, Waterman and Wiley.

As the regular essayist for the evening was absent, Dr. L. D. Waterman reported the following case orally:

Was called, Nov. 25, 1872, to see Mr. J. S., aet. 45, who was laboring with strangulated left oblique inguinal hernia. The hernia had existed for ten years, and had descended into the scrotum.

Efforts at reduction, by the taxis, had been made by other physicians, for three days prior to his application to me for relief.

I also tried to reduce the hernia by manipulations. Placed the patient in every comfortable position. Tried first to reduce it without, and then with the aid of chloroform. Tried ice water locally, with large doses of morphia internally. Failing in all our efforts, and upon consultation with Dr. I. Walker and others, we decided upon the use of the knife.

The integument and superficial fascia were freely divided; the deep fascia was carefully divided, as were also a few fibres of the intercolumnar. A few slight nicks with the knife were made at the internal abdominal ring, when we were enabled to return the bowel without cutting into the sac. No hemorrhage or other complication during the operation. A compress and bandage were applied, and a light diet and rest were prescribed.

The skin united in twenty-four hours, but was broken through again on the fourth day, owing to suppuration in and around the neck of the sac.

After this the case progressed rapidly, the parts were entirely healed in three weeks, and what is more remarkable, the case now appears to be radically cured. Indeed, the inguinal canal appears to be so firmly closed, throughout its entire length, as to almost preclude the possibility of another return of the bowel.

I hope the members of this Academy will take into consideration that this case is reported too soon after the operation, for one to pronounce it a perfect "radical cure." Had it not been that the regular essayist for the evening was absent, I would not have thought of making this off hand, incomplete report. I will say, however, that the case shall be watched, and if it proves to be a failure as regards the radical cure, (which is the interesting part of it,) the Society shall hear of it.

Dr. Todd.—Physicians frequently err in their prolonged efforts at reduction. It is my opinion, that in many cases an operation should be made much earlier

than is usually done; more especially does this apply to strangulated hernia in recent cases and in muscular subjects.

Dr. Bigelow.—No surgeon should treat by another's taxis, but should try himself, when, on failure by such means, he should operate. We make altogether too much of a bugaboo about wounding the peritoneum; the great danger connected with simple incisions of said membrane is, in my opinion, all nonsense. It is really more tolerant of wounds than are many tissues of the human body. Two out of five cases in my own practice terminated fatally, owing to too long a postponement of the operation.

I must differ from the gentleman who reported the case, as regards the radical cure being any way remarkable or exceptional. It is my belief that after an operation for inguinal strangulated hernia, radical cures are the *rule* and not the *exception*. Such is not the case however in the femoral variety.

Dr. Walker.—Witnessed Dr. Waterman's operation, and was of the opinion that it was made at just the right moment. A case occurred in his own practice, in which a strangulated inguinal hernia was reduced by the taxis after the fifth or sixth effort, and after as many days had elapsed after the strangulation.

Dr. Thompson.—Held that any intelligent physician who has to do with any given case, and who is competent to treat such cases, is far better prepared to judge concerning the time for an operation, than is one who simply hears the case reported. It was his belief that Dr. Bigelow stood alone in his views, viz: "That a radical cure was the *rule* and not the *exception* after an operation for the relief of strangulation.

Reviews.

THE DRUGGIST—Tilden & Co., New Lebanon, N. J., propose to issue a monthly journal of above name, of 16 pages. Single copy, \$1.50; five copies, \$6.00.

THE NEW CHEMISTRY, the first principles of Chemical Theory, by Harvey M. Wiley, M. D., Prof. of Chemistry in Indiana Medical College, Indianapolis.

This small work of 32 pages, contains the gist of the "principles" of chemistry according the new notation and nomenclature. The Dr. is not an ultra, not of the Wöhler type, naming each symbol until we have a name six inches long, and not to be remembered. This he avoids, at the same time where practical, he follows this rule. A theory of ozone is given, claimed by the Dr., as not found in any work or advanced by any authority. Of course it, in common with symbolic characters in general, is only a guess at the most proper and convenient, to be replaced by others if we wish. A useful table is appended, giving the elements, date of discovery, names of discoverers, atomic weight, quantivalence, weight of a litre of gas and derivation of names.

ADDRESS of Prof. Geo. W. Mears, M. D., to the students of Indiana Medical College, at the opening of the session of 1873.

The Prof. contrasts the ultra old with the ultra new, without directly committing himself in favor of either. He gives various instances of this changing of sentiment evinced by the profession at large, and in individual cases. The following is a typical and striking case, calling to mind a sudden conversion or sudden invasion of insane sentiment:

"Soon after I located in this city I made the acquaintance of Dr. Coe, who is doubtless remembered by many within my hearing. He was now fifty-five or sixty years old, and though erect, agile and physically active, a very ghost in appearance, having in the exercise of an abiding faith in the necessity for still further depletion,

bled himself until there was not the semblance of a red globule in his system.

His poor little wife, who was equally active, and apparently in otherwise ordinary health, presented the same cadaverous aspect. Both were bled periodically—probably as often as once a month. Upon a certain occasion the doctor was called to New York on business, which would of necessity detain him beyond the bleeding day. I was requested, on his departure, to perform the operation. On my arrival at the house I found the old lady preparing for a visit, on horseback, of some twelve miles in the country. She was chagrined exceedingly at the disappointment it must occasion me, but after a moment's reflection determined, as I was on the ground, that I should bleed her son, a boy of some ten years, who was in the yard playing with the chickens. The youth doubtless considering the honor of the house involved in the necessity for some sanguinary sacrifice upon the occasion, though peremptorily declining to become the victim himself, insisted upon having his favorite rooster bled.

It may surprise you somewhat to learn that the doctor, who had manifested for long years such unmistakable evidence of monomania on the subject of bleeding and enormous doses of medicine (I have seen him give aloetic pills as large as a morello cherry), should die in the faith of homœopathy; nevertheless such was the fact. It was a striking illustration of the meeting of two extremes."

NEBULA, COMETS, Meteoric Stones, and the Revelation of the Spectroscope regarding them, by Prof. H. Scheller and others.

CORAL AND CORAL ISLANDS, by Prof. J. D. Dana, of Yale College. Estes & Lauriat, Boston.

SPECTRUMIC ANALYSIS DISCOVERY, showing its application in microscopical results, and to the discovery of the physical constitution and movement of the heavenly bodies. From the works of Scheller, Young, Roscoe, Lockyer, Huggins and others. Lee & Sheperd, Boston.

These two small works constitute No. 4 and 5 of the "Half Hour Recreation in Popular Science," Dana and Estes as editors.

Spectral Analysis is one of those things which, as far

as we are aware, was not known to the "old moderns." Newton opened the door but did not enter in, this was left to the labors of Kirkoff, Scheller, Huggins, Lockyer and Young. It has become one of the most beautiful and useful branches of science.

What is told us in these few pages would, if read without former knowledge of the revelation of the Spectroscope, seem to us like a "hoax" higher and upon a moreslender foundation than the "moon hoax," or perhaps some magically woven "Arabian nights" narrative. But since it has stood the test of time and research, we must admit that our field of knowledge has been enlarged in so ample a manner, as to make amends for many false steps and "going in circles," which seems not to make a favorable impression upon our minds. The sun, though seen each day, and a knowledge of it longed for, was still altogether mysterious. Like the soul of man, or God himself, it was unapproachable and past finding out; we could but wonder, not conjecture, as to its nature. And so of comets, stars, meteors, etc.

What now is the received doctrine mentioned by the tell tale lines of the Spectrum? We see them with solid nucleus or luminous gases surrounding, composed of material identical with that found upon our earth.

The same is true of the "fixed stars," while the planets have been found what conjecture led us to believe, to be similar in every essential respect with our earth.

Comets, too, have been supposed to have lost their unknown and mysterious nature, and are now classed with the "stuff of which worlds are made." Their bodies being indeed but aggregation, more or less of meteoric masses, their "tails" more finely divided particles, or gaseous. Such the spectroscope reveals them. The "showers of meteors," twice a year regularly, and often at sundry times, are now but the manifestations

of that portentous appendage of the wonder of the heavens, that to the multitude was the harbinger of evil, and the incarnation of the mysterious to the bold few.

Descending from the vast and celestial to the terrestrial and minute, we find many things revealed which before was hidden to science. The chemist analyses complex mixtures, separating many of the metals, alkalies, and alkali earths from each other as surely and far more correctly than by any other method. The physician and histologist dissecting the minute and ultimate constituents of living bodies, many of which at least, having their characteristic bonds of light. And in chemico-vital language, we might say that the body resultant of organization, glowing in the liberated light of the sun long before stored up, speaks and tells with certainty, of its ultimate constituted character, and each molecule light the path traversed by searchers after knowledge.

May such works be encouraged to appear, so that the masses may have truths of easy understanding presented to them, and the scientist *multum in parvo*.

THIRTY-SECOND ANNUAL REPORT OF THE PENNSYLVANIA HOSPITAL FOR THE INSANE, for the year 1873, by Thomas S. Kirkbride, M. D., Physician in chief and Superintendent, Philadelphia.

This institution has 206 male and 189 female patients, and during its 32 years of existence, the whole number has been 6,390. The report contains some very pertinent remarks in regard to popular errors—their cause and remedies—decrying the frequency of the man being housed in asylums, touching the asserted existence of “Private Asylums,” there not being more than five or six in the country; the influence of the press in correcting erroneous ideas connected with this subject, is shown, and a plea for a better and more thorough course of instruction in our medical schools upon the subject of insanity.

THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA, Fifth Decennial Review, by authority of the National Convention for reviewing the Pharmacopœia, held at Washington, A. D. 1870. Philadelphia: J. B. Lippencott & Co.

This work every practitioner should have, and most certainly every druggist. The relation of weights and measures are given, twenty-eight articles added to *materia medica*, and five dismissed; eighty-two preparations added, and seven dismissed; twenty-two new fluid extracts added, while in the classes of *liquors*, *unguenta*, etc., great changes have been made.

THE POPULAR SCIENCE MONTHLY, Conducted by Prof. E. L. Youmans, published monthly; each number contains 128 pages.

The Popular Science Monthly will be supplied at reduced rates with any periodical published in this country.

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Remittances should be made by postal money-order or check to the publishers. D. Appleton & Co., 549 and 551 Broadway, New York.

HALF YEARLY COMPENDIUM OF MEDICAL SCIENCE, Part XI, January 1873, S. W. Button, M. D., 115 South 7th street, Philadelphia. Price, \$3 per annum. Filled with its usual quantity of valuable matter.

MEDICAL RECORD—a Revision of the progress of medicine, surgery, obstetrics and allied sciences. 15 Waterloo Place, London.

Clinics.

BEFORE THE CLASS OF THE INDIANA MEDICAL COLLEGE.

By Thad. M. Stevens, M. D.

SEXUAL ABUSE.

GENTLEMEN: This patient is suffering from the effect of sexual abuse, or rather to be more explicit, his system is in that condition which you will often find in those who having abused themselves in former times, have clinging to them a relaxed condition of the sexual organs with involuntary emission of semen.

This man some years since, was in the habit of committing self-abuse, or masturbating as it is termed. Shortly, in consequence, or at least as an associate, diseased manifestation of his cerebral organ became apparent and he was sent to the Insane Asylum. Here his brain in a good degree, recovered its normal state, but he still continued to have involuntary discharges of seminal fluid, at first associated with erection of the penis, and erotic feelings. At length those latter signs of activity disappeared and left a relaxed condition of the generative organs. The involuntary discharge at various periods, mostly at night, still continue. This was his condition when, some months since, he came under our observation. Along with these signs of disease we found his nervous system in an unstable condition. He could not sustain exertion; weakness, trembling and hurried breathing being the result, showing that his nervous centres were in a disordered state; nerve power or force being inadequately evolved; his tongue, being the index of the digestive system, was coated with a brown streak down each side, with a furred centre: this coating or "furr" was found to be persistent after the use of remedies. This, indeed, is a condition of tongue that you will often see where disorder of the alimentary canal

has been chronic; not only as to position upon the sides of the tongue, but as to its persistency. At the same time his appetite is variable and digestion imperfect; his countenance, more marked when we first saw him, still presents the peculiar appearance, hard to describe, but easily recognized when once seen, which is often found in persons addicted to the secret vice. It may be pale but generally of a dark venous flush, flabby and puffed, giving, upon a casual glance, the appearance of slight dropsical effusion. Often you will find the pupils of the eyes dilated more or less, and in many cases a peculiar stare which can not be mistaken.

The pathological condition in most cases, are the unstable and weakened condition of the nervous system with instability added. There are two interesting points in such a case which I wish to speak of.

1st. As to the supervention of insanity.

2d. The proper status of the condition termed spermatorrhœa.

A man can not be insane in this manner, unless his cerebral organs are either directly or indirectly disordered. The trouble may start in the brain itself, or it may be irritation reflected from some other part or organ of the body.

Now this insane condition arises sometimes after this habit has been indulged in, but it is not a constant attendant. The alternate irritation and exhaustion of the nervous system from masturbation may and often does cause other neurotic manifestation, such as chorea, paralyzes, etc., or the system simply breaks down as it were, and exhaustion of various organic functions, with the subsequent supervention of palpable disease, are the result. We can not generally foresee in what organ such diseased action will show itself. What centres or parts be more particularly attacked. We may watch the first indication but can not tell beforehand.

It is true there is a rule of pretty general application.

that disordered action be shown first in the weakest or most unstable parts. And could we know, as sometimes we may suspect, from the history of individuals, where this so-called organ or part was, we might, as it would be our duty to try, prevent by means directed thereto from its being attacked. For instance, the history of epilepsy in the patient's family would direct our thoughts and attention to the apprehension of such manifestation in him, either as the result of this cause of irritation and disorder, or in fact of any other, and so of paralysis, insanity, etc. Where phthisis is the family history or tendency, we find that any general course of disease will manifest itself in the lungs by *favoring* the formation of tubercles. This is a law which is general and reliable. It constitutes a safe guide to discover such *tendencies*.

As regards this man we have no history of any such *tendency* of neurotic or other disease, but that this tendency was present we do not doubt. In other words, suppose his whole family history showed no cerebral or nervous disorders, still we feel confident that either originally implanted in the man from his birth, or acquired during his life, his mental functions, or brain if you please, is particularly liable to take on diseased action. Just as in some cases the liability for tubercles to form is a *transmitted* quality of the system in others acquired. The point is, gentlemen, that the so-called hereditary diseases, of which insanity is one, may be acquired by the individual, while hereditary tendencies have nothing to do with it. And not only can it appear *de novo*, but it is, as I firmly believe, in a certain sense, contagious. Insanity, although it has no *material* *materia morbi* or germ, still I think it capable of demonstration is contagious also.

Now, as to the direct relationship of insanity and self-abuse, some hold that the insanity is primary and the erotic feelings and acts are as consequences, others that

the opposite rule holds true. We are of opinion that both classes of cases are found. Certainly we see both males and females who are insane. Paroxysm, where the erotic feeling manifest themselves in acts of self-abuse, indecent exposure of person, etc., is a specimen of impulse common to many cases.

In other subjects, however, we have the mental disturbance gradually induced, and, also, it is of a peculiar character. The individual is silent, moody, timid, shuns society. His countenance and demeanor bespeak bashfulness and reticency. He is noticed to be peculiar by his associates.

In most cases, as in this, we think we are justified in viewing the mental disturbance as a consequence, and the *habit* as the cause. It is either this or a very strong coincident. It is true we may have about the same train of system culminating in unmistakable insanity, and yet we have no antecedent self-abuse. In other words, different causes may produce the same pathological condition of the nervous system and brain. All we can say is, in any case, that as a *rule* these are the physical and mental systems we may expect to find where self-abuse is found and associated with disorder of the cerebral organs gradual in development, advancing *pari passu* with the continuance of the local irritation.

As we said before, insanity may not be the result. Epilepsy may take its place, or paralysis, showing the greater effect of the irritation upon the spinal cord, or absence of the nervous and the presence of the deranged digestion. Secretion and assimilation may be found, or one or more of them combined.

There is no iron rule, unbending in its nature, for the treatment of such cases. You must be governed by the circumstances. In this case we are guided by the condition of his digestive organs, and secernent system Gave moderately of hydrogiri chloride. There is no danger with this article of producing salivation or other

deleterious effects, if used in proper doses and not permitted to remain in the system, while its beneficial effects are prompt and certain. Combined with and following this a pill composed of quinine, strychnine and phosphate of iron, was given and is still continued. Quinine, in large doses, must be used, for according to our view part of its benefits are due to its effect upon the nervous system. Under this treatment, accompanied with instructions to eat what agrees with him, early rising and out door, though not fatiguing exercise, seem to have caused a decided improvement, and we hope soon, in two or three months, for time is an element in treatment here, to see him clothed in his right mind and comparative rugged health.

Editorial.

Medical societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

Upon the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

We wish to say that those signifying their desire for the *enlarged Journal* are comparatively few. This no

doubt arises from carelessness upon the part of the subscribers, but we have no other means of knowing their wishes except by notice sent as above expressed. So, *practically*, it amounts to the same as an order to continue just as we are. We regret this, as we desired to so enlarge, but of course must suit the majority of those who take the JOURNAL. Those who *do* want the change, and have not yet expressed such wish to us, will see the necessity of acting promptly in the matter, and of sending their orders *at once*. The responsibility is with *you*, not with *us*.

THE Obstetrical Journal of Great Britain and Ireland, including midwifery and the diseases of woman and infants; edited by James H. Aveling, M. D., honorary member of the Obstetrical Society of Dublin; Corresponding Fellow of the Obstetrical Society of Edinburgh; Corresponding Member of the Gynæcological Society of Boston, U. S. A.; Honorary Secretary and Examiner of Midwives to the Obstetrical Society of London; Physician to the Chelsea Hospital for Women, etc.; and Alfred Wiltshire, M. D., Member of the Royal College of Physicians of London; Corresponding Fellow of the Obstetrical Society of Edinburgh; Honorary Librarian to the Obstetrical Society of London; Honorary Secretary to the Medical Society of London; Physician for Diseases of Women to the West London Hospital; Assistant Physician-Accoucheur to St. Mary's Hospital; late Medical Inspector to H. M. Privy Council, etc., *ad infinitum*.

Each number of the Obstetrical Journal will contain sixty-four (or more) pages, and the Memoirs will, when desirable, be illustrated with wood engravings.

The price of the monthly number will be 1s. 6d.; the annual subscription, 18s.

All communications to the editors may be addressed to the care of J. & A. Churchill, New Burlington St., Philadelphia; Lindsay and Blakiston.

The twenty-fourth annual session of the American Medical Association, will be held in St. Louis, Mo., May 6, 1873, at 11 A. M. At this meeting the following amendments to the Constitution will be acted on:

Resolved, That the United States Marine Hospital Service be placed in the same relative position in the American Medical Association as the Medical Departments of the United States Army and Navy.

And that, in paragraph 2, of the 2d section, after the words "army and navy," the words "and the United States Marine Hospital Service" be inserted.

Also, the following amendments to Sec. 3—*Standing Committees*—of the By-laws:

That, instead of a report on Medical Education, on Medical Literature, and Climatology and Epidemic Diseases, there shall be annually delivered before the Association at its general meetings, an address in Medicine, an address in Surgery, an address in Midwifery, or the Diseases of Children, the lecturers to be appointed this year by the President; afterwards by the Committee on Nominations.

Also, in section 6, after the words, "the chiefs of the bureaus of the army and navy," be inserted "and the supervising surgeon of the United States Marine Hospital Service."

Physicians desiring to present papers before the Association should observe the following rule:

"Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the Secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary to whom such papers are sent, to examine them with care, and with the advice of the Chairman of his Section, to determine the time and order of their presentation, and give due notice of the same."

The following is the name and address of the Secretaries of the different sections:

Chemistry and Materia Medica—Dr. Ephriam Cutter, Boston, Mass.

Practice of Medicine and Obstetrics—Dr. Benjamin F. Dawson, New York City, N. Y.

Surgery and Anatomy—Dr. W. F. Peck, Davenport, Iowa.

Meteorology and Epidemics—Dr. Elisha Harris, New York City, N. Y.

Medical Jurisprudence, Hygiene and Physiology—Dr. A. B. Arnold, Baltimore, Md.

Psychology—Dr. John Curwen, Harrisburg, Pa.

Secretaries of all Medical Organizations are requested to forward lists of their delegates, as soon as elected, to Wm. B. Atkinson, M. D., Permanent Secretary, 1400 Pine Street, S. W. cor. Broad, Philadelphia.

SEVERAL very annoying typographical errors occurred in our last number, such as parephelium for perihelion, phrase for phase, as found in the Editorial column also *musilage*, etc., in the article of Dr. Beckners, all of which we corrected in two proofs. No one but those who have been similarly situated can, nor do we expect them to, appreciate the amount of trouble such mistakes give us. The only good we see in them is that they cause more notice to be taken of the Journal than otherwise, for every superficial and hypercritical individual is keen to pick out faults, while a good production, without errors, is cast aside without a word of commendation; in fact, the more solid articles are scarcely read except by the few. Still we do not like errors, and *hope* that this number will be *clean*.

The commencement exercises of the Indiana Medical College were held February , in the hall of the High School, Dr. Cyrus Nutt, of the State University, conferring degrees; Dr. McClintock, valedictorian, and a short address by R. N. Todd, M. D., President of Board of Trustees. The degree of M. D. was conferred upon forty-eight graduates, from a class of ninety-six. A Spring course will be given in this College commencing

culatation, causing acute pain, and fears were entertained that amputation would become necessary. After a protracted confinement to his room, he so far recovered as to attend to business. At intervals he had attacks of hemorrhage, accompanied with alarming dyspnœa. He thought he was laboring under tuberculosis. The symptoms in his last illness were characterized by hemorrhage and dyspnea, tongue furred, stomach irritable, pulse irregular, intermittent, and at times imperceptible at the wrists. Liver torpid, urine scant and high colored, palpitation, skin dry, lips frequently tinged with blue, bowels constipated, with nausea and vomiting, both feet and legs œdematous, severe pain in popliteal space of left leg, marked periodicity of violent and alarming symptoms, respiration hurried, appetite irregular, generally restless.

According to the request of the doctor, a post mortem was made, with the following results:

AUTOPSY.—While removing the sternum, six quarts of fluids escaped; two lobules of right and one of left lung were hepatized; some old pleuretic adhesions; liver slightly congested, wt. $47\frac{1}{2}$ oz.; spleen normal, lesser omentum wanting in adeps; no effusion into the pericardium; heart, wt. 12 oz.; valves normal except a little induration of; tricuspid cavities filled with coagula. Died of pyæmia of the left popliteal vein, embolism of the right ventricle of the heart and thrombosis of pulmonary artery.

P. W. NOLAND,
E. J. HOWARD,
J. S. MORGAN,
FRANK NELSON,
R. K. GOODWIN.

Dr. Todd

INDIANA JOURNAL OF MEDICINE.

VOL. III.

APRIL, 1873.

No. 12.

Graduating Class of 1872-3.

ADDRESS TO GRADUATING CLASS OF 1872-3.

BY R. N. TODD, M. D.

GENTLEMEN: The relation of teacher and student, which has existed between us so pleasantly, terminates with the exercises of this evening. For my colleagues of the Faculty and myself, I shall take the occasion to offer some suggestions in reference to your future profession, conduct, etc. No man can reasonably expect to succeed in any department in life, who sets out without some settled plan or purpose—some carefully considered object to be attained. As well might the mechanic expect to succeed in the erection of some stately edifice by simply polishing and smoothing every beam of timber, or every block of stone, without having measured and fitted each for a particular place in the structure with a relation to the entire design. Memory brings back to each of us our days of college life, with a vivid recollection of hopes and joys—hopes never realized, joys never known. And yet, gentlemen, I would not discourage you, nor cast a shade of sadness across your prospective professional pathway, but only wish to give you some of our experience, gathered, as

yours must be, amidst the daily round of professional toil. You meet with much to dishearten and discourage. Conscious of your own knowledge of your profession, and honesty and integrity of purpose in life, you may be left to sit in your office, day after day and weeks and months together, having only now and then a professional call, while all around you see the busy, bustling, ignorant vender of some improved system of practice reaping a golden harvest of gain. You doubtless remember the anecdote of the young physician whose office was situated next door to one of the former system. He sat daily pouring over his library and had but few visitors, while the busy reformer was daily overrun with business. One day, after several months had thus passed, the busy quack found time to call on his less successful neighbor. He remarked, "Dr., I see you have but little business, and I am well aware you are well educated and thoroughly understand your profession; do you know the true reason for my better success?" The young man answered, "No, I do not." "Well," says the reformer, "bring your chair and sit near the window, and I will explain." He did so. "Now count," says the successful doctor, "twelve men that pass and tell me from their appearance, how many of the number look to be thoughtful, careful, and discriminating men." He did as directed, and reported that he thought there were two of that description. "Well, then," says Reformer, "ten of them are mine; two are left for you." This may perhaps be somewhat overdrawn, but yet there is a certain amount of truth in the figure. In truth, gentlemen, I know of nothing more surely calculated to insure your ultimate success than a slow and gradual growth in business, affording you time to study carefully each case presented, and by careful investigation of your books, and a carefully kept record of each day's events, you will be enabled to give your patron the best possible treatment, and at the same time imprint in memory the

valuable facts of each particular case. Do not desire, then, young gentlemen, to assume too much at once.

Speaking of having a definite object in life at the outset of a professional career, then what should be this object with each of you? Permit me to say plainly to you just now, that if you have chosen medicine simply as a road to wealth and affluence, you have made a fatal mistake. You had better stop where you are; do not accept your diploma at all, or consign it to the flames rather than accept it only to dishonor it. What would be your estimate of a Gospel Minister who was shameless enough to declare that he only preached for money; and yet, gentlemen, he is just as much entitled to respect as the medical practitioner who evinces no higher estimate of a learned and honorable profession. No, I am persuaded that you will all feel yourselves proud of being deemed worthy of admittance to the great army of learned and good men who have been physicians in all ages, and among all nations. Let your main object in life be to be useful and honorable members of your chosen calling, useful to humanity by your skill, kindness and integrity, useful to your profession by carefully observing its time-honored usages and laws in relation to your professional conduct, and rising early, toiling long, and watching late to bring some newly discovered fact to add to the common stock of knowledge. By diligence in business, energy and application, you can not fail to secure to yourselves the esteem and confidence of those of a community whose esteem is of value to you, and an abundant reward for professional toil.

Permit me to caution you in regard to your conduct with your competitors in business. Be ever guarded and careful what you say of them personally, or their practice. Always remember "the golden rule." Nay, go farther. If you are made the subject of abuse and misrepresentation, never condescend to reply, only answer by a quiet dignified right course—and be assured

this denial will broaden and deepen and widen more than all the fiery controversy and contention that can be made. In your intercourse with the public, be modest and dignified, never trying to push yourselves to the front in matters not connected with your profession, as the manner of some is; be ever ready to aid in every good work, remembering that you owe this in your relation to community and as a member of the same, aside from your professional standing. Never condescend to help yourself along in business by riding some wave of popular reform. Such a course is a virtual acknowledgment of medical weakness. Above all remember that every instinct of a true medical man is charity to the poor. Imitate the brightest example left on the page of history—the charity of one who “went about doing good;” never courting or fawning on the rich or great, but seeing your brother in every man be he ever so humble or poor. Should you be situated in reach of a Medical Society, let it be your first duty to become an active working member; and if out of reach of any, try at once to establish one. I would recommend you to supply yourselves with at least two good medical journals, and also to commence at once with a carefully kept case-book, from which, from time to time, you may obtain material for a valuable contribution to your society or journal. And now, gentlemen, on behalf of my colleagues and for myself, accept the warmest and best wishes of the Indiana Medical College for your success and happiness—for a long life of honorable usefulness, and, when called in the course of time and nature to cease your labors, the satisfaction that comes from the consciousness of a life well spent.

DR. NUTT'S ADDRESS.

PRESIDENT OF THE STATE UNIVERSITY.

YOUNG GENTLEMEN: Having attended the lectures and instructions of the Medical Faculty, for the required period, and having passed satisfactory examinations, you now receive the honors of your Alma Mater, and are passed from the grade of student to the degree of Doctor of Medicine, and are henceforth to engage in the practice of the "healing art," endorsed by the worthy and able men who compose the trustees and faculty of the Indiana Medical College. These noble men who have labored to establish and maintain a medical school, which is an honor to Indiana, and which, we are proud to say, ranks among the first schools of the kind in the west, you have, in these testimonials a passport to the confidence and respect of the people wherever you may locate. Take good care that the influence with which you are thus clothed shall be exerted for the good of the community, and the conservation and elevation of public morals. Show yourselves worthy of the age and country in which you live; and prove yourselves worthy sons of your "Alma Mater." Hence forward your real work begins; but remember that your education will end only with your lives. Constant growth in every excellence and virtue is a duty which you owe to yourselves, your country, and to your God. Let your motto be "Excelsior," "onward and still onward;" rest not until you have attained the foremost rank in your honored profession, and then keep it. Keep up with this rapidly advancing age. Be diligent in work, accurate in observations, and contribute your full share to the investigations, enlargement, and perfection of the science of medicine; and may the world be the better because you have lived and labored. The best wishes of your Faculty and friends greet and cheer you as you enter the ranks of the workers in your noble and useful profession.

May heaven reward your efforts with the greatest success!

THE LIST OF GRADUATES.

The class which had been standing during the delivery of the address, then received the long coveted parchments. The graduates numbered forty-eight, and were listed as follows: Alfred Capel, Gilead, Miami county, Ind.; Harie Pontious, Noblesville, Ind.; D. Leachman, Elizabethtown, Ind.; W. B. McDonald, Crawfordsville, Ind.; M. F. Crain, Angola, Ind.; B. H. Perce, Mooresville, Ind.; Samuel Mason, Montpelier, Blackford county, Ind.; I. J. Becknel, Goshen, Ind.; O. C. Toby, Hagerstown, Md.; G. W. Meredith, Rochester, Ind.; A. B. Surguy, Rochester, Ind.; H. H. Moss, Rensselaer, Ind.; O. H. Sullivan, Indianapolis, Ind.; J. D. Godfrey, Indianapolis, Ind.; Frederick Gobbel, Unionville, Ind.; George W. Thompson, Winamac, Ind.; S. B. Williams, Valparaiso, Ind.; S. M. Comer, Indianapolis, Ind.; J. F. Jessup, Indianapolis, Ind.; W. Y. Wells, Columbia City, Ind.; Sylvanus Jay, Denning, Hamilton county, Ind.; D. R. Walker, Trafalgar, Ind.; A. J. Pinson, New Goshen, Vigo county, Ind.; Henry Charles, Fairmont, Grant county, Ind.; Wesley Wilson, Lake, Spencer county, Ind.; J. W. Selman, Indianapolis, Ind.; A. S. Bates, Upland, Grant county, Ind.; A. B. Wolverton, Wakarusa, Elkhart county, Ind.; W. H. Keeney, Crawfordsville, Ind.; Charles McKillen, Edon, Ohio; W. D. McClintock, Indianapolis, valedictorian; G. A. Osburn, Lafayette, Ind.; W. W. Williams, Noblesville, Ind.; Abijah Jones, Richmond, Ind.; M. F. Brown, Norwood, Mercer county, Illinois; W. H. Lemon, Greencastle, Ind.; B. J. Cleavenger, Portland, Ind.; J. H. Tilford, Indianapolis, Ind.; Erasmus Test, (ad eundem degree) Richmond Ind.; W. F. Harvey, Plainfield, Ind.; Wesley Allen, West Newton, Marion county, Ind.; W. H. McAlister, New Sheron, Iowa; D. A. Pettigrew, Pittsboro,

Hendricks county, Ind.; A. N. Weir, Graysville, Sullivan county, Ind.; Lewis Manker, Bridgeport, Marion county, Ind.; R. Trowbridge, Jamestown, Boone county, Ind.; H. G. Todd, Danville, (honorary.)

After conferring the degrees, President Nutt said that he had not prepared an address appropriate to the occasion, beyond the mere form used in performing such office, but he could not refrain from urging upon all present the necessity of a State providing for the highest scientific education of her people. Thirty years ago people grumbled at the idea of free schools; they were frightened by the idea of taxes; but now they glory in the school system which insures to every human intellect the advantages of free culture in most of the departments of education. Why the honorable members of our Legislature should vote against the medical department of the State University—a department necessary to render it complete—can not be well understood. Our noble sister (Michigan) on the north has set a better example, and has yearly from 400 to 600 students in medicine, science and other departments attending her university. Howard College, now over 200 years old, and Yale 183 years, is just beginning to rise to the rank of first class universities. While in Europe we see at Berlin a university sprung into existence within fifty years with 200 professors, and an appropriation of \$200,000 per annum; and why should not Indiana with her wealth and in the center of the United States, have a university of her own equal to any in our country.

The address of President Nutt was loudly and repeatedly cheered during its delivery, and impressed the audience with a deep sense of the necessity for a higher educational standard in the State of Indiana.

STUDENTS' VALEDICTORY.

BY W. D. M'CLINTOCK, M. D.

Members of the Faculty, Fellow Students, Ladies and Gentlemen:—To me has been accorded the honor of delivering the valedictory address, in behalf of the graduating class of the past session, and I now appear before you to endeavor to perform the duty conferred upon me. The word farewell, is indeed, a sad word, the saddest, no doubt, in the language. How often in our life's history has it pained our hearts to pronounce it.

To-night the time of separation has arrived; we have reached the point where our ways divide, and we are called upon to bid adieu to our worthy professors, and to one another, and to the pleasant associations that it has been our good fortune to enjoy during the past session. We have met to reciprocate our commingled joys and sorrows. Parting addresses occupy us; parting sympathies afflict us; and the sundering ties of duty and friendship admonish us, that our pupilage is ended. The last scene is acting, perhaps, in which we will take a part on the collegiate theater. The degree of Doctor of Medicine, with which we will return to our homes and friends, presupposes attainments of no mean value, and is calculated to inspire us with lofty ideas of personal consequence. We are now ready to go forth adventurers, (unsuspecting perhaps) into a fascinating but illusive world; a world where honor flaunts its fictitious trappings, where wealth displays imposing charms, and pleasure spreads her poisoned banquets; at an age, too, when the fancy is most vivid, when the blood flows rapidly "through our veins," and the pulse of life beats high. Already does the opening scene brighten as we approach it, and happiness smiling, but deceitful, passes before our eyes, and beckons us on to her embrace.

It is customary upon occasions of this kind, to notice the rise and progress of medicine. Such was my inten-

tion when first chosen valedictorian, but upon examination of the subject, I found the field too vast. It would occupy too much time to go back to the days of Esculapius, and mention the names of the great and good men who, by their devotion to the cause of suffering humanity, by their indomitable zeal and energy in search of truth, employed their lives and talents in laying the foundation and advancing the interest of the profession.

Suffice it to say, the most rapid advancement in the science of medicine, has been within the last half century. All honor to our worthy predecessors, for their earnest endeavors in its promotion—placing it as they have in the first rank among her sister sciences. The noblest minds, the profoundest thinkers, the mightiest intellects, the most untiring students, have aided in its advancement. We are proud of the fact that our own country has produced eminent physicians, whose contributions to medical literature will probably remain long after their authors have ceased to exist.

New investigations have been carefully made, new principles developed, unexpected discoveries elicited, and new theories promulgated, that have changed the whole of medicine. This rapid advancement may be attributed first, to the brilliant discoveries in the new science of chemistry, rendering solutions to the processes of nutrition, respiration, secretion, excretion and calorification; second, to the rapid advancement in experimental physiology, by which the functions of the various organs have been more fully understood; thirdly, to microscopy, by which we may notice the development of the germ cell, the organization of the tissues, the changes incident to inflammation and other morbid processes; fourth, to the study of comparative anatomy and physiology; fifth, to the advancement of a knowledge of the morbid anatomy of disease; sixth, to the cultivation to almost perfection of new methods of investigating disease, by which a diagnosis is rendered more certain, viz:

auscultation and percussion ; seventh, to the discovery of anesthetics, of new remedial agents, the active principles of various drugs, and the amount of such necessary to produce certain results.

In the conflict with mortality, the medical profession has achieved brilliant triumphs, and let me not be deemed visionary when I say the time is not far distant when the practitioner of medicine will only make the diagnosis laid down in his text book, and apply the remedies prescribed in his dispensatory. There is no greater reason for believing mortal maladies which remain *necessarily* mortal, than there once was for believing those to be so that now yield to the power of medicine.

The field is still open, and we will not have done all that man requires or God enjoins, so long as a disease remains to be healed, or a pain to be relieved. Brilliant are the successes of the past, but hope lights up the future with promises of triumphs still more brilliant to be continued, until by a more perfect knowledge of disease, a more complete development of revelation, a farther augmentation of comforts, a wiser formation of habits, and a holier manner of life, Pandora's box shall again be closed, the vigor of primitive constitutions reappear, and the longevity of the antedeluvian man, in a manner, return.

Fellow Students, we are indeed fortunate in having the honor of entering the medical profession at the present time, receiving as we do, the benefit of the study and experience of many noble, zealous men, whose lives were spent in advancing the interests of the profession they adorned. We should feel proud of the high position occupied by the regular profession at the present day, and should enter its rank with firm resolves to do our whole duty in the struggles of the profession against mortality, and in the reduction of the science of medicine toward ultimate perfection. What study so interesting? What object so praiseworthy? What practice so

productive of good to the human family? A profession of so much importance that the Savior of the world, when upon earth, deigned to enter its ranks, and went about healing the sick, causing the blind to see and the lame to leap for joy. And as we go forth to practice our learned and noble profession, I hope we go with zeal and ardor, with elevated and expanded views, and noble and disinterested motives, always alive to the promotion of truth, the suppression of quackery and empiricism, and to the relief and amelioration of suffering humanity. Remember

‘He whose ardor brightly burneth,
With a purpose pure and strong,
In the end a laurel earneth,
Nobler than the highest song.’

The opportunities that have been afforded us to acquire a thorough medical education, have been far in advance of our predecessors, and if we fail to meet the demands of an intelligent and discriminating public, the blame may be justly attached to ourselves. The present has been denominated truthfully a progressive age, an age in which the light of knowledge is being widely disseminated in philosophy and art, and the people are calling loudly for men of learning and moral worth to fill our pulpits, our legislative halls, and lastly, but not least, do they demand intelligent and thoroughly educated physicians.

The people want physicians who can be “touched by a feeling of their infirmities,” men of benevolent and virtuous character, whose exertions are limited by no boundaries of territory; who with a perseverance that never relaxes, and a vigilance that never slumbers, are pursuing not only their own, but the public welfare; whose hours of leisure are occupied in the study of their profession, and whose grand and predominant aim is the relief or amelioration of suffering humanity.

Fellow Students, let us not be satisfied with the medi-

cal knowledge gained, the acquirements made, in the Indiana Medical College, which, although they may be very respectable, and of which we may be pretty proud, are the rudiments merely of an education which must hereafter be pursued. In the acquisition of medical knowledge let us never be stationary, but always progressive. Let us be encouraged by the example of men of ordinary talents, who by a rigid and patient application to study, have often risen to the highest eminence, and standing far above the position where the momentary sallies of uncultivated genius ever reach, have plucked from the lofty cliff the deathless laurel. Let us not disregard the reasonable claims of that future public, that will soon be anxious to employ us in its service and crown us with honors.

In fine, let us be true to ourselves, to our patrons, to our beloved alma mater, and to the principles taught us from the rostrum.

Go answer the call, it is noble to hear it; though we are pained to say farewell, where duty may lead may the all guiding Spirit go where you are going, and dwell where you dwell.

Members of the Faculty, any figure of speech that I might be able to control, would be inadequate to express our heartfelt thanks for the gentlemanly and courteous manner with which you treated us during our connection with the Indiana Medical College. We gratefully acknowledge the high degree of interest you have manifested in our behalf, the masterly manner with which you have performed your several duties, and your eloquent and expressive efforts upon the rostrum. Be assured, gentlemen, your efforts have been appreciated, and may the future lives of the graduating class of 72-3 prove that your efforts have not been in vain. With the present faculty, we bespeak for the Indiana Medical College, a brilliant future, "equaled by few and surpassed by none."

In behalf of the graduating class we pledge you our earnest endeavors to promote the interest of the Alma Mater; we further pledge our lives and all the talents we possess, in advancing the interest of the profession we have chosen, and in the reduction of the science of medicine toward ultimate perfection. In conclusion, members of the Faculty, may your lives be like the day more beautiful in the evening; like the summer aglow with promises, or like the autumn rich with golden rewards, when your good works and deeds have ripened in the field.

STUDENTS ASSOCIATION—VALEDICTORY.

BY M. F. CRAIN, M. D.

MR. PRESIDENT—Ladies and Gentlemen—We have been assembling within these halls from time to time during the last few months, under the name of the Students Medical Association. And we appear before you this evening for the purpose of bidding our beloved Association adieu. As the present session of the Indiana Medical College is fast drawing to a close, it admonishes us that the time will soon come, when we shall repair to our respective home, there to engage in the highly important and life-long duties of our chosen profession. And it is with sad hearts that we assemble, knowing that many of us will never be allowed to meet again in this capacity. Yet, we feel, that although this may be the fact, that the memories of the many pleasant hours we have spent, and the important lessons we have learned here, will be treasured up in the minds of each individual; and during the long lapse of years that will ensue, they will appear bright as ever when his memory recalls the winter of 1872-3.

It is with pleasure, that in looking back over the past few weeks that we have been allowed to assemble here, we see nothing but kindness manifest in every act of the members of this association one to another. There has been no petty quarrels or misunderstandings which are apt to creep into societies of this kind, thereby divesting them of most of their interest. But on the contrary, they have shown all respect and consideration to one another, not forgetting the fact that we are brothers of the same fraternity, and co-laborers in the same great cause. We have met with but one purpose in view, that of eliciting truth and exchanging views one with another, and to that alone have we turned our attention. It has been the object of the Association to throw as much light as possible upon matters brought before it for discussion, and thus help prepare its members for the stern realities of a professional career. It also of its very nature compels a person to think and reason upon matters which will be of more than vital interest to him in after life. It improves the mind and causes us to dive deep into the hidden mysteries of nature, and what once seemed almost insurmountable barriers disappear gradually before the irresistible workings of the mind that is alive to the future as well as the present.

And it has been through the operations of the mind, through deep and earnest thought, that man has been enabled to master the great problems that have been presented unto him ever since the creation. It is that that has caused the triumph of mind over matter. It is thought that has led to the great discoveries of the nineteenth century. The triumphs of thought are countless as the sands upon the sea shore, and her realms are boundless almost as space.

We are constantly confronted by the works of art, many of which are beautiful and pleasing to the eye; and yet, from the most perfect and accomplished

down to the most bungling of her works, we behold design manifested in every act.

Man first must have an ideal, and then by a process of sound reasoning, good judgment and untiring energy, his ideal is transformed into a reality; and he beholds no longer a seemingly but a real thing, exactly like or more perfect than the ideal.

Thus it is by earnest thought and sound reasoning, that we are to be enabled to overcome the difficulties, and solve the deep problems that will be constantly presented to us in the duties of a life spent in the practice of our profession.

Man is ever progressing in the arts, sciences, and indeed every thing to which he turns his attention. As his knowledge increases his ideals assume more and more a perfect nature, until at length his time and labors are rewarded by a realization of his most sanguine hopes and expectations. I do not wish it understood that we may not have ideals that can never be realized, for undoubtedly such is the case; but I speak of those that are consistent with reason, and which are not opposed either directly or indirectly to the great laws that govern the universe.

All this becomes manifest as we study the progress of the "science and art of medicine," through its successive steps from its birth up to the present time. And although it would be extremely interesting to follow its progress in all its details, I have neither time nor space to do so had I the ability.

Hippocrates, who lived "361 years before the christian era." regarded the human system as being under the direction of a conservative principle which he denominated "nature." He was also in possession of a great discovery when he remarked that "nature cures disease;" that is disease is removed from the system by the agency of those laws which exist and act in conformity with a wise or an intelligent design.

After many years it has been proven that this ideal of Hippocrates, "*Vis Medicatrix Natura*," was not merely an ideal, but that such a principle does exist. It follows then that man has no power of himself to cure disease, he can only aid nature by acting in conformity with her laws, and when he acts otherwise he is sure to defeat her intentions. This conviction should be ever present in the mind of every physician when at the bedside of the sick.

All are familiar with the history of the immortal Harvey, and the persecutions he underwent when he first brought before the world the result of his investigations, not only at the hands of the public, but at the hands of the profession of which he was a disciple. When he promulgated the beautiful theory of the circulation of the blood, and which becomes more beautiful and interesting as we study and contemplate the mechanism, and the various forces at work by which the vital fluid is propelled throughout the entire system, furnishing to every organ and tissue the elements necessary for the maintenance of life and health of the individual; that theory which proved that the arteries do not contain air as was supposed. By the ancients, he was declared a heretic and a wizard, but he lived to see his beloved theory the accepted one; to be known and respected by the public; and the profession must ever pay tribute to the memory of him who has conferred upon them an almost incalculable benefit. The fact is, and ever has been, that the ignorant mind has always stood in the way of all scientific research. Blind folly and ignorant superstition meet us at every step as we endeavor to climb the rugged hill of science, and they use every means in their power to repel and force us back; and if we show the least sign of weakness or leave any part unguarded, they return with redoubled energy, causing our overthrow and carry us back in triumph.

But this need not deter us in our investigations as scientific men; on the contrary, it should fire us with new energy with which to fight the battles of life, knowing full well if we come off victorious, our reward will be commensurate with the trials and difficulties we have undergone.

Who knows but that some one of our number may write his name high upon the "immortal tablets of fame," by the discovery of some important principle that now remains hidden in the dark mysteries of the unseen.

Would it be anticipating too much to say, that it may remain for some student of the Indiana Medical College to discover the true nature and cause of the specific poison called "Malaria," or throw such light upon the subject of Tuberculosis as will enable us to stay that fearful disease, that terrible scourge of mankind in its progress, and give us the power to snatch the afflicted, almost from the very jaws of death, and restore them to their friends and families. Such a victory as that would be greater than all the glory or renown ever achieved upon the "bloody field of battle." But many times it will be impossible to accomplish this; all that can be done is to palliate suffering, and smooth the patient's pathway through the "dark valley;" and by doing this we discharge our duty, and gain the respect and confidence of the people.

There are many whose names will ever appear bright upon the pages of history, and not the least among them is that of Dr. Jenner, who about the latter part of the seventeenth century, brought before the world the theory of vaccination, as a means of preventing that heretofore scourge of all races and of all nations, small-pox. Nor was this result arrived at without great difficulty, indeed, it was only by an extensive course of observations and experiments, and amidst discouragements which would have extinguished a less ardent

enthusiasm, that he brought his theory into perfection. And he lived to see it universally adopted, to be known and respected by an admiring people, and to know that his name would be handed down to posterity in letters of burnished gold, as undoubtedly one of the world's great benefactors, who has converted that disease so terrible to humanity—that sweep over the world like the dreaded simoon of the desert, scorching and scatching everything in its irresistible course, bringing death and destruction, and leaving mourning and desolation in its tracks—into a comparatively trivial one.

The discovery of galvanism by Galvani, an Italian professor of anatomy, was a grand thing in its time, and has been used quite extensively in medicine. It also has been the means of explaining many things which were before shrouded in mystery.

Chemistry has come to our aid, and has enabled us to investigate, not only the remedies that are used to mitigate suffering and disease, not only the tissues and organs of the body, but also the invisible gasses, many of which are extremely noxious. It also explains many phenomena of which we, before, were unable to form even an intelligent idea.

Then we have the microscope, by which we can study objects which, because of their minuteness, are invisible to the naked eye, and it has opened up boundless fields for research and scientific inquiry. The triumphs of thought in medicine are many, and yet we believe there remains many to be achieved; for the science, although not in its infancy, is yet far from perfection. It is making rapid strides in its development, and it behooves us, as true and earnest physicians, to keep ourselves well informed as it moves onward and upward in its majestic progress.

No other profession offers such boundless fields for observation and research, and its difficulties seem greatly to enhance the pleasure we feel, as we proceed step by

step in their investigation. Man has always exhibited a wonderful fancy for the mysterious; he has always endeavored to pry into the most secret workings of nature, and in that respect medicine offers him unparalleled inducements, but they also require a great amount of study, time and labor. How many there are who enter the profession without the faintest conception of the labors they will have to undergo, the trials, the self-sacrifices and hardships, which it will be their lot to encounter. Of such, many soon become weary, slothful and negligent, and set their wits at work to manufacture some worthless compound, which they palm off upon the public as something having almost supernatural power to cure disease of whatever nature, and unfortunately they but too often succeed, thus bringing great disrepute upon "legitimate medicine."

We have just passed through a long course of study preparatory to engaging in the active duties of our profession, and a number of us must soon go forth into the world, there to offer our services to the sick and the afflicted; to begin a new life, a life of unremitting toil, of harrassing duties, and one which will cause us many a self-sacrifice. Soon we will have entrusted to our care the lives and health of our patrons, who will look to us for advice respecting their friends and families, which are dearer to them than life itself. To us, if we prove ourselves worthy of confidence, will be entrusted the secrets and ailments of each family; and if we would become respected by the public and the profession, we must endeavor to merit their confidence. We must be true, earnest, upright and honest physicians, ever ready to engage in any thing that will be conducive to the happiness and welfare of the community in which we reside. Like the good soldier, we must ever be found at our post of duty.

We believe it the duty of every student, when he leaves these halls to engage in the practice of medicine,

to become a member of some good Medical Society, that his interest in the profession may not flag, for our student days must never end until life itself departs. We would earnestly commend our association to the careful consideration of those who will return at the next session, promising them rich rewards in return if they will take hold of it with true energy and determination.

But what shall we say of the Faculty? those men who have labored so hard for our advancement? As time and space are limited we will leave it to a more appropriate occasion, and to a man better qualified, the duty of rendering unto them a proper tribute. Suffice it to say however, that the instructions we have received at their hands will be treasured up in our memories, to be called forth as occasion demands; and amidst trials and scenes of danger they will cheer us on, and inspire us with confidence and courage with which to meet and overcome the difficulties which will cluster around our pathway. May they live long to teach the truths of medicine, and when they too shall have been called from the scenes of their labor, may they leave behind them a record as bright as he who has been called before them.

And now, in this capacity we must bid you adieu, hoping that when the frosts of old age gather upon our temples, and old "Father Time" shall have wrinkled our foreheads, we may look back upon a long life well spent.

Proceedings of Societies.

STUDENTS' MEDICAL ASSOCIATION.

INDIANA MEDICAL COLLEGE, Feb. 14, 1873.

House called to order at 7.30 P. M., President Perce in the chair.

Roll called, and the following members present: Beck-

nell, Charles, Caple, Crain, Keeney, Lemmon, Mason, McDonald, Osborn, Porter, Perce, Pugh, Selman, Sarguy, Stevens, Williams W. H., Williams L. B., Walker, Wishard, Thompson, Cleavenger, Bates, Pinson, McClinck, Brunt, Janes, Meredith, Jessup, McKillen, Kinsey, Brown, Littler, Jay, Woolverton, Pierson and Wells.

Minutes of previous meeting read and approved.

Marcus F. Crain delivered the valedictory for the evening, which consisted of a retrospective view of the transactions of the Society, the success with which it had been attended, and the progress of its members.

Prof. Brown was called upon to speak, and at once responded, first complimenting the essayest for the noble manner in which he delivered his address. He afterwards gave advice and encouragement to those who were expecting to graduate, and enter the field for the purpose of practicing medicine.

Prof. Wiley was next called for. He also gave encouragement to the members of the Association, stating the progress of the Society, and the strength now, compared with its former strength.

Prof. Stevens also favored the Society with a speech of considerable length. He thought teachers and students had done exceedingly well in regard to close application during the session. Also advising young practitioners to be social, and strive to play the "agreeable in general."

Doctors Van Vorhis, Walker and Charles, also, made timely and appropriate remarks.

The President was next called for, and although short, his remarks conveyed many facts, and valuable ideas to the student of medicine. In conclusion, he referred to the death of one of the members of the Association, J. B. Lasley, M. D., who had been called from his early professional career by death.

A vote of thanks was then tendered the Faculty for

use of room, &c. Also, to tender a vote of thanks to the officers for faithfully discharging their duties.

The meeting then adjourned, *sine die*.

I. J. BECKNELL, *Sec'y*.

B. H. PERCE, *Pres't*.

PROCEEDINGS OF ALUMNI.

INDIANA MEDICAL COLLEGE, Feb. 28, 1873.

At a meeting of the Alumni of the Indiana Medical College, Dr. Stratford announced the death of Dr. J. B. Lasley.

It was moved and passed that Doctors Wiley, Ransom and Davis, be appointed a committee to draft resolutions expressive of the feelings of the meeting.

The committee reported the following extract from a paper read by Dr. Hunt, *Pres't* of the Alumni. Also, on motion of Dr. Stratford, that the report be handed to the *Indiana Journal of Medicine* for publication :

“But we reflect with sadness that our number has been, even within the short space of one year, lessened by one, and one to whose quickness of perception, mental vivacity, and good judgment, made a deep impression on our minds, convincing us, as we imagine, that such a combination of prime intellectual faculties, rightly trained and cultivated, in the future could not but bring eminence and distinction to the possessor.

We were not intimately acquainted with his habits of study, but presume they were not so close as those of some others, yet it could be readily seen that the distinguishing feature of his mind was the acute perceptive powers with which he was largely endowed. Then the correct judgment was strikingly shown by the logical and conclusive deductions drawn from the subject under consideration. We love to dwell on such a mind, for

we sometimes suppose that such reflections and investigations tend to quicken and invigorate the minds of other men. But when we leave these thoughts pertaining to him while in the class, and as one of us, and go with him and consider the sad fate which he was destined to undergo, we are indeed melancholy at the thought of one as promising, should be taken out of existence so quickly. But we leave the rest with you, hoping that it may be well with him."

Z. W. MEREDITH, *Sec'y.*

Reviews.

FOURTH ANNUAL REPORT OF THE SECRETARY OF STATE of the State of Michigan, relative to the Registry and Return of Births, Marriages and Deaths for the year 1870. Lansing, Mich.

This report is a credit to the State of Michigan, the plan and execution are both good; the preparation of it being under the "immediate supervision of Dr. H. B. Baker, to whom belongs the credit of whatever merit it may possess."

A few extracts in reference to a few of the points of interest treated of will not be out of place. In speaking of the "constant proportion of births in the various seasons," it says:

"Dr. Derby, who has had editorial charge of the Registration Reports of Massachusetts since 1865, concludes that 'It does not seem to depend upon physiological causes, as in the lower animals, but rather upon custom, religious observances, and occupations. The great number of marriages which take place in Massachusetts about Thanksgiving and in the early winter, doubtless influence it.' 'The enforced separation of husbands from their wives at certain seasons of the year, in order that the occupations of seamen, of fishermen, of laborers, etc., may be pursued, are still operative,'

He is influenced in forming and maintaining these opinions, by the fact that in England, during the seven years, 1860 to 1866, inclusive, 51.7 per cent of the annual births occurred in the first half of the year. Even though the relation between the seasons be different in different countries, the uniformity of proportion of births in each season in the same locality indicates the action of fixed natural laws, which can be determined by sufficient comparison and study of statistics, collected for a proper length of time. Whether the causes be mainly physiological or sociological, they are evidently acting year after year, and their expression can therefore, in all probability, be reduced to general laws. In searching for the prominent cause of this uniformity of birth-rate by seasons of the year, the first comparison suggested is with the time of the greatest and least number of marriages."

And again :

"Taking the statistics as they stand, it appears plain, then, from Table III, first, that the uniform proportion of births by seasons is in a majority of months influenced by the number of marriages; second, that, for the reason that the excess or deficit in the number of births compared with the average number is larger than the excess or deficit of marriages for the months in which the conceptions occurred, compared with the average number of marriages, it would appear that the marriage-rate is not—to say the least—the only cause of the uniform excess or deficiency of births at different seasons of the year; third, taking the two foregoing propositions together, it seems that both the marriage and the birth rate are to some extent dependent upon the same cause, which, although not manifest here, it is altogether probable is a physiological one, and directly connected with climate or season of the year.

"This discussion is important mainly because of an immediate influence on both the marriage and the birth rate, which is generally understood so far as marriages are concerned, but which does not seem to have been mentioned in connection with births; it is the will of persons who may or may not choose to marry or become parents, as the case may be, at any given season of the year. If it be ascertained that for physiological reasons

it will conduce much more to the health and happiness of the parties concerned if marriages or births occur at certain seasons of the year, the slight considerations which are now frequently allowed to control these events may be overborne by that knowledge, and a greater degree of health and happiness result."

As to nativity of parents:

"The eminent statistician, Dr. Edward Jarvis, of Massachusetts, in an article published in the *Atlantic Monthly* for April, 1872,—afterwards reprinted pamphlet form,—has undertaken to defend this country from the numerous charges made against it as one unfavorable to natural growth of population by reproduction."

"In our own State, an able gentleman,—Dr. H. O. Hitchcock, of Kalamazoo, late President of the State Medical Society,—has himself collected some important statistics of the inhabitants of Kalamazoo, bearing upon the question of the relative number of children born of native and foreign parents, which seem to be more conclusive on this point than any as yet collected by the State, and which, so far as the locality observed is concerned, seem to demonstrate two propositions, which he states as follows:

'1st. The number of non-fertile America families is disproportionately large.'

'2d. American families have fewer children than others. * * * And yet it will be seen that it is fashionable among Americans to have one, two, or even three children.'

"Now, although it be true that American families have fewer children than our foreign-born inhabitants, it does not follow that they contribute less towards maintaining the population. It remains to be ascertained whether the death-rate among children of foreign-born parents is the same as among the children of the natives. This important factor in the problem must be taken into the account before deciding the question. In the absence of knowledge on this point, it will not do to assume, as many have done, that the death-rate of children of native and foreign-born parents is the same."

As to sex of twins, etc.:

"So far as the evidence has been examined, it seems that the proportion of males is greater among twins

than of all children born. The same may be said concerning triplets."

As to relation of birth-rates and female offsprings :

"It seems a fair inference from the evidence in Table XX, that causes tending to increase the birth-rate tend also to increase the proportion of female offspring, this being equivalent to decreasing the proportion of males. It will be seen also by comparing the right-hand side of Tables III and XXII, that less than the average proportion of males were conceived in months in which the greatest number of marriages occurred, and a greater than average proportion of males in months which there were less than the average number of marriages. To this rule there were three exceptions."

If our space permitted there are many points we should like to mention. We would that our own State had something of the kind ; but alas ! we must follow—and that far in the rear—instead of leading.

A TREATISE ON THE THEORY AND PRACTICE OF OBSTETRICS, by Wm. H. Byford, A. M., M. D., Professor of Obstetrics and Diseases of Women and Children, in the Chicago Medical College, etc.; Second Edition, thoroughly Revised; New York, Wm. Wood & Co., 1873.

This work is intended "to be considered a guide to the student and busy practitioner," and at the same time comprehensive. Judging from the works, etc., referred to, as having been consulted, we should say great labor has been bestowed upon it.

It begins with a description of the pelvis, the human head and the relation of the fœtus to the pelvic cavity ; then a full exposé of generatim. In the description of this a clear idea is attained of the reason why the seminal fluid of some males will not impregnate, the spermatic cell being cast forth before the spermatozoa is fairly evolved. The changes in the ovum and growth of the fœtus follows. In all these, and indeed throughout the work, the plates for illustration are admirable.

We believe that in reviewing a former edition of this work a "hypercritic" found fault with the doctor's ground, etc.; we have not so carefully examined the present to know if that objection holds good, but whether it does or not is not of much matter to us. The work is gotten up in good style, illustrated better than usual, and the subject matter very fully and plainly set forth, and *those* are the points that should commend or damn a work. We can recommend the present edition to the profession.

SCIENCE AND ART OF SURGERY, being a treatise on Surgical Injury, Diseases and Operation, by John Erie Erichson, senior Surgeon to University Hospital and Professor of Clinical Surgery in University College, London.

A new Edition, enlarged and carefully revised by the author, illustrated by upwards of seven hundred engravings on wood, in two volumes; Henry C. Lee, Philadelphia, 1873; Cathcart & Cleland, Indianapolis.

ILLUSTRATIONS OF THE INFLUENCES OF THE MIND UPON the Body in Health and Disease, designed to elucidate the action of the imagination, by Daniel H. Tuck, M. D., M. R. C. P.; joint author of "The Manual of Psychological Medicine," etc.; Philadelphia, Henry C. Lee; Indianapolis, Cathcart & Cleland, 1873.

This is a work that fills a space long vacant—any one that is interested³ in Psychology, and indeed every physician, should read it.

DENTAL CARIES AND ITS CAUSES, with Illustrations and investigations into the influences of Fungi in the destruction of the teeth, by Drs. Leber and Botherstein, translated by Thomas H. Chandler, D. M. O., professor of Mechanical Dentistry in the Dental School of Harvard University; Lindsay & Blackiston, Pub., Philadelphia, 1873; Bowen, Stewart & Co., Indianapolis.

This is a small work of about 100 pages, but complete upon the subject treated; the illustrations are good and text plain. Physicians and especially dentists will find much of interest within its pages.

A HAND BOOK OF POST MORTEM EXAMINATIONS AND OF Morbid Anatomy, by Francis Delafield, M. D., Curator to Bellevue Hospital, etc.; William Wood & Co., New York, 1873.

Just such a manual as this was long needed, "a guide to perform post mortem examinations." "The book is divided into four parts, the first giving the method of performing autopsies on the bodies of adults and of young children; the second gives in detail the lesions which have been observed in each organ of the body; the third gives the lesions which are found after death from general diseases, from violence, and from injuries; the fourth gives a short classification of tumors."

ONE LAW IN NATURE, a new theory comprehending unity of forces, idemnity of matter and its multiple atom constitutionally applied to the physical affection or modes of energy, by Captain Hall Lazelle, U. S. A.; DeVan Nortrana, New York, 1873.

Beguiled by the rather captivating title of this work, imagining it contained much interesting, in a scientific point of view, we purchased it,—and therefore certainly have a right to express our views freely—a mass of twaddle, all made up of phrases, without sense and scarcely contains creditable nonsense, making one law—imagination—to constitute the cause of every phenomena, the physical and vital forces, the instinct of brute, the same of man and divinity itself. Spinozo never dreamed of the absurdities here expressed, and if he had would have expressed them in more intelligent language.

A TREATMENT ON APOPLEXY, Cerebral Hemorrhage, Cerebral Embolism, Cerebral Gout, Cerebral Rheumatism and Epidemic Cerebral-spinal Meningitis, by John A. Lidell, A. M. M. D., Professor of Anatomy in the National Medical College, Washington, D. C., etc.; New York, Wm. Wood & Co.; Indianapolis, Cathcart & Cleland.

This treatise "was written because the author belived he had something of importance to say on the subject of apoplexy," and seems to be a very full condensation of

the subject, and also of (as the title indicates) cerebral hemorrhage, cerebro-spinal meningitis, etc., explained by recital of numerous cases—examples of each pathological form noticed.

Editorial.

MEDICAL societies and clinical reports, correspondence, news, etc., of medical interest solicited. To insure publication articles must be practical and brief. The practical experience of country practitioners are of particular value. The editor disclaims any responsibility for statements made by correspondents.

Upon the first of May, 1873, we propose to enlarge our Journal to sixty-four pages, and increase the price to \$3.00, *if sufficient numbers signify assent*. All who favor such change will please send their orders at once. We append, for convenience, a form. This, or something similar to be sent by subscribers:

Editor Indiana Journal of Medicine—SIR:—You will please send me your Journal, as enlarged, upon the 1st of May, 1873, remittance for which will then be made.

Yours, etc.

We wish to say that those signifying their desire for the *enlarged Journal* are comparatively few. This no doubt arises from carelessness on the part of the subscribers, but we have no other means of knowing their wishes except by notices sent as above expressed. So, *practically* it amounts to the same as an order to continue just as we are. We regret this, as we desired to so enlarge, but of course must suit the majority of those who take the JOURNAL. Those who *do* want the change, and have not yet expressed such a wish to us, will see the necessity of acting promptly in the matter, and of sending their orders *at once*. The responsibility is with *you*, not with *us*.

DR. J. S. DUNLAP, son of the late Prof. Livingston Dunlap, of this city, has gone to Europe for the purpose, we believe, of perfecting his knowledge in regard to diseases of the "throat and ear," to which he intends to turn his especial attention hereafter. The London Throat Hospital is his point of attraction, after which, Paris, etc. The Dr. being one of the best anatomists in the West, and especially versed in the typography of the ear, will, we predict, make the study a success.

THE Library of the American Medical Association, Washington, D. C., with Jaseph M. Toner, M. D., No. 615 Louisiana Avenue, as Librarian, calls for contributions of books, pamphlets, etc., to be preserved for reference. Said library is to have its "Habitat" in the Smithsonian Institute, a safe and permanent place. The object is a good one, and we hope will receive encouragement from the profession. It is something we have long needed.

NOW READY.—The American Hand-Book of Chemical and Physical Apparatus, for use in Schools, Colleges, Factories, Laboratories, etc., bound in cloth, and comprising illustrations of over eight hundred objects, showing many forms of apparatus, not before illustrated in American Catalogues. Address, E. B. Benjamin, importer and manufacturer of Chemical and Physical Apparatus, 10 Barclay street, New York. Price \$1.50 per copy.

INDIANA MEDICAL COLLEGE—GRADUATING EXERCISES OF THE CLASS OF 1872-3.—The graduating exercises of the Indiana Medical College were held in the City High School Hall, February 28, 1873. The students and Alumni met at the College Hall at seven o'clock, and, headed by the Noblesville band, marched to the High School Hall, where they were greeted by a large audience, composed of friends of education, including a number of Senators and Members of the House of Representa-

tives. Upon entering the hall the graduating class took their respective positions directly fronting the rostrum, occupied by the Revs. Cyrus Nutt, R. T. Brown, Dr. R. N. Todd and W. D. McClintock, the speakers of the evening, and others. The Noblesville band occupied the right of the hall, near the rostrum, and commenced the evening exercises with music, after which the Rev. R. T. Brown offered an impressive prayer, which was followed by another instrumental piece from the band. W. D. McClintock, on the part of the graduating class, delivered the students valedictory, which, together with the addresses to the students by Prof. R. N. Todd and Rev. Cyrus Nutt, appears in this number of the JOURNAL.

THE following analysis, made by us, shows how some "things are done." Pills used by an "Indian Doctor"—no minerals—having great success in curing ague with them, upon analysis found to consist of the following hypothetical prescription:

Sulph. Cinchona, g. 40; Ferrocyanide of Iron, 3i; Oil Piper Niger, gtt. xx; Arsenious Acid, g. 1; Fiat pilula No. 20.

A mixture used as an "opium antidote," warranted to contain no opium, found to consist of narcotine in syrup colored with aniline.

Miscellaneous.

WHAT IS CINCHO-QUININE?—The chemical manipulation of the Cinchona or Peruvian barks, reveals the presence in them of quite a number of most remarkable, complex bodies. No vegetable production, except the poppy, affords such a marvellous combination of valuable medicinal principles as *loxa* and *calisaya* barks, and no

substances have been studied with greater care or more intense interest by chemists. Nothing short of the subtle chemical forces controlled by the Infinite One, could construct from the elements of the earth and air a bitter principle like quinia, or those other agents associated in bark, so closely allied to it physically and chemically. A handful of the finely comminuted fibres of the yellow bark, which resembles physically a dozen other varieties, is made to yield by the chemist, when treated with aqueous and alcoholic liquids and acids, a dark, bitter solution, unattractive in taste and appearance. If the process is skilfully conducted, or exhaustive in its results, there remains, beside the solution, a portion of woody fibre, inert and almost tasteless. It holds considerable coloring and some waxy matter, together with a little tannin; but the active chemical or medicinal principles have been removed, and are held in the dark liquid. The exhausted bark is not entirely worthless, for it may be dried and used as fuel. But what of the dark liquid? From this the chemist obtains, besides other substances, a portion of beautiful, white, silky crystals; not wholly of one distinct kind, but of several, all of which possess about equal chemical and therapeutical importance. No wonder it seems to the uninitiated in chemical manipulation a difficult work to perform. It is, however, quite easy to the thoroughly instructed. The first principle isolated may be the quinia. This is not held in the bark in its naked alkaloidal condition, but locked up, in the form of a salt, with another acid called *kinic acid*. In the bark it is *kinate of quinine*. We isolate the quinia, tear it from its embrace with kinic acid, throw that away, force it into a kind of matrimonial alliance with sulphuric acid, and in this condition of *sulphate of quinia*, use it as a medicine. This kinic acid marries into several other families resident in the bark, prominent among which are *cinchonia*, *cinchonidia*, *quinidia*, etc. Precisely how many of these alkaloidal principles the

different kinds of barks contain, is unknown; but it is safe to assume that there are as many as four others which, although not distinctly pointed out, are tolerably well recognized. These *kinates* are all *kindred* in nature, and all labor to the same end, when isolated and set to work as therapeutical agents in the human system.

In one hundred ounces of good yellow bark, we obtain about two and three-fourths ounces of quinia, and two ounces of cinchonia, with variable amounts of the other principles, but less than the two named. It is to be regretted that we can not remove the different families of kinates from the bark in their natural state of saline combination. It seems reasonable to suppose their action upon the system would be more salutary than in other forms. It is easy to isolate the kinic acid, and having the alkaloids, the kinates of quinia, cinchonia, etc., can be re-formed; but in these chemical changes so much disturbance to natural organic combinations is made, that, practically, we realize no marked advantages. It seems unnatural to force a natural alkaloidal base out of its association with an organic acid, and recombine it with a mineral acid. This we do in the preparation of the sulphate of quinia. However, as it has served so good a purpose for many years, it is not best to quarrel with the theory.

All the alkaloids of bark possess about equal febrifuge and tonic properties, when isolated and administered in that condition. This has been proved over and over again by all competent chemists and physicians, from Drs. Gomez, Duncan, Pelletier, Caventou, down to the time of Liebig's researches, a quarter of a century ago, and from that time to the present by a hundred careful chemical and medical observers.

How the one alkaloid, quinia, came to supersede the others, and drive them into the background, is easily understood, when we remember that it was about the first that was distinctly eliminated, studied, and experi-

mented with; and the *eclat* it acquired caused everything else to be neglected. The natural bark, holding all the alkaloids, the quinia, cinchonia, quinidia, etc., has always been observed to produce more efficient and prompt results, both as a tonic and febrifuge, than the quinia, or either of the other principles in themselves; but holding also, as it does, tannin, gum, starch, fibrine, and coloring matter, all of which are medicinally interfering or inert, its use is rendered inconvenient and inadmissible in many cases. Besides, it is apt to produce disturbance of the gastric functions of an unpleasant character. Acting upon the idea that the natural alkaloidal principles of bark, in their simple, unchanged condition, separated from the gross, woody, and other matters, would better subserve all therapeutical ends than the barks themselves, or *any one* of the alkaloids separately employed, Cincho-Quinine has been prepared.

Cincho-Quinine contains no external agents, as sugar, licorice, starch, magnesia, etc. *It is wholly composed of the bark alkaloids*; 1st, quinia; 2d, cinchonia; 3d, quinidia; 4th, cinchonidia; 5th, other alkaloidal principles present in barks, which have not been distinctly isolated, and the precise nature of which are not well understood. In the beautiful white amorphous scales of Cincho-Quinine, the whole of the active febrifuge and tonic principles of the cinchonia barks are secured without the inert, bulky lignin, gum, etc. It is believed to have these advantages over sulphate of quinine:—

1st. It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach or creating nausea. It does not produce cerebral distress, as sulphate of quinine is apt to do, and in the large number of cases in which it has been tried, it has been found to produce much less constitutional disturbance.

2d. *It has the great advantage of being nearly tasteless.*

The bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

3d. It is less costly than sulphate of quinine. Like the sulphate of quinine, the price will fluctuate with the rise and fall of barks, but it will always be less than the lowest market price of that salt.

4th. It meets indications not met by the salt.—*Boston Journal of Chemistry.*

SCIENTIFIC SURGERY.—The following may be accepted as a verity or a fish story, according to the taste of the reader. It purports to be from *Virchow's Archives*, published at Berlin :

THE EXPERIMENT.

It was at Liepzig that the experiment was performed. A soldier who had killed the colonel of a regiment in cold blood, and whom the severity of Prussian military discipline would have caused to die a hundred deaths had it been possible, was deliberately handed over to the surgeons, by sentence of court-martial, and was confined in a strong room in the military hospital, entirely in the dark as to the fate which awaited him. He was kept there ready for an emergency which did not fail to occur. A keeper of a beer-celler in Leipzig, a man resembling in many respects the condemned soldier, and who had been seized with acute inflammation of the heart, or rather of its investing membrane, was brought to the hospital to die of that promptly fatal malady. No sooner had the anticipated death taken place than the dead saloon keeper was placed on a table by the side of another operating table, on which was the chloroformed but living body of the soldier. Two surgeons, with assistants, proceeded alike in both cases to divide the scalp over the summit of the skull from ear to ear, turn back the divisions, and remove the skull-cap by incisions passing around the skull like a crown. In the soldier, whose caroted arteries had been

prepared for compression, these vessels were clamped so as to prevent hemorrhage, and but a few drops of blood were lost during the operation. In each the dura mater was incised, and the hemispheres of the brain were removed by an incision with a sharp, thin-bladed knife passing above the cerebellum, or a narrow portion of about two inches in diameter called the crura cerebri. The brain of the saloon-keeper, which was sound, the heart disease having left it intact, he having been sensible to the last, was transferred to the skull of the soldier, and by an ingenious contrivance, fully detailed in the *Gazette*, the continuity of the arterial and venous tubes was established. The greatest care was taken in securing the natural adaption of the parts to a fraction of a line, and the skull, having been replaced simply, was held down in position by the scalp, which was drawn over, and its edges confined by strips of adhesive plaster, and over all was placed a bandage. It was not until several days had passed that the pressure upon the carotid arteries was entirely relaxed, although before the skull was replaced the flow of blood in the vessels of the brain was proved to be restored. The chief fear was from the results of inflammation and suppuration, but fortunately neither ensued, and the wounded parts healed kindly. There was from the first no difficulty in feeding the patient, nor was difficulty apprehended, for it is well known that in puppies and kittens in which the entire brain has been removed, sucking and swallowing go on as well as before the operation, and in this case the nerves which preside over deglutition and digestion were far below the point of section. The patient remained in a sound sleep for two weeks, as in a case of apoplexy, the circulation, digestion, and all the vegetative functions of life being uninterrupted. The gradual union of the parts were shown by faint but gradually-increasing movements of the limbs, of the jaws, and of the muscles of expression in the face. Speech did not

become possible until the close of the third week, and then it was hesitating, stammering, as a child learns. Although it was evident that the patient tried to utter words and sentences, it was very gradually that the power of intelligible articulation returned.

THE WONDERFUL RESULTS.

The *Gazette* contains the report in a tabular form of the increasing voluntary power over the arms and hands, as measured from day to day by the dynamometer, the measurements given in kilogrammes; also, the daily temperature of the limbs, as shown by the thermometer in degrees of centigrade; also, the measure of returning sensibility of the fingers and lips, as given by an instrument called an æsthesiometer; but I omit these, as your readers will be interested in the main facts only.

When speech became intelligible it was found that the soldier, as he seemed, had forgotten entirely his military training and discipline; on the other hand he told, at a formal examination, in the presence of a number of witnesses, the prices of all the wines and beers, such as the saloon-keeper had been in the habit of buying and selling, manifesting the unimpaired cerebral activity of the latter. His memory recalled the saloon-keeper's relatives, friends, and customers, whom he called by name. The soldier had been ugly, taciturn, revengeful; he now had the saloon-keeper's frankness, and even garrulity, in spite of his stammering utterance. He was totally blind. Although the nerves of smell and sight had been approximated in the operation, they failed to unite. It was both sad and strange to see and hear the soldier groping in his infirmity of blindness, and giving proof of all the patient endurance and goodness of heart which had made the saloon-keeper deservedly esteemed and prosperous. These are the main facts in the case as far as detailed in the *Archive*, but the subject of experiment presents so many important problems of the relation between blood and brain, of heart power and

nervous energy, that we may be well assured that no facts of interest in the changed condition of the culprit will be permitted to escape notice and record. A grave point of discussion is whether he must still be considered a criminal and suffer as a guilty soldier, or shall be pensioned and liberally cared for in his infirmity as a guiltless and much suffering beer-seller. Public sentiment is divided. Emperor William says "No," peremptorily. The Emperor William's judges therefore all say "Ya wohl." The Emperor William's professors of metaphysics in the Emperor's universities say it is clearly a case of ego and non-ego, and the people seem willing that the matter should rest there as far as the metaphysical aspects of the question are concerned.

For my part, I merely give the facts of the case and the proofs on which they rest.—*Secular Press*.

The above is inserted as a specimen of newspaper paragraphing.—Ed.

An answer to the following questions has been asked of us by a physician :

"Do experts receive additional compensation? If so, by what power? Can they refuse to testify unless the fee is secured? Who pays the fee? What standard controls the amount that such fees shall be?"

Now these are all important points, and are too often ignored by physicians, and we will answer all these questions thus :

We must keep in mind the difference between common witnesses and experts. We infer that such questions are intended to apply to the latter. The former only testifying as to actual facts, the latter giving their opinions upon such facts.

The common witness, if in the same county, is compelled to testify, both in civil and criminal cases, without a guarantee of fee. The same rule applies if subpoenaed

to another county in *criminal cases*, but the expert, although he is obliged to obey the subpœna, if in the same county, is not obliged to give his opinion in the case, or testify, *unless his fee is secured*, while if subpœnaed out of the county, he is not even obliged to obey such subpœna without a guarantee of fees. The parties liable, and to whom he must look for such guarantee, are those who subpœnaed him. The rule regulating the amount of said fee must be established by the medical profession. For instance: A is subpœnaed *in his own county* to appear and give evidence *as an expert*, expresses his professional opinion in a certain case, he is bound to obey and appear, but *can and ought* to refuse to testify unless a fee is guaranteed him. Say a case of malpractice, or of alleged insanity, we should think the fee to be demanded would be reasonable all the way from \$25 to \$50 a day, and perhaps more, according to circumstances; if subpœnaed *out of his county*, for then he is not obliged to obey unless his reasonable fee is paid or secured by the party wishing his opinion, be it for the State or otherwise.

Upon this subject we would refer the gentleman who sent us these interrogatories, and others who are not posted, to Greenleaf on Evidence, Vol. I, Sec. 310, note 3; also, Bouvier's Dictionary, article, "Witness."

THE USE OF OXYGEN.—The oxygen in a room can be doubled by the simple process of DE MOTAY. This consists in heating manganate of soda in steam, whereby oxygen is discharged and water taken up, yielding a mixture of caustic soda and oxide of manganese, which, on being heated in a current of air, takes up oxygen and gives out water, and is reconverted into manganate of soda, which admits a repetition of the process. In this manner as will be understood, oxygen is extracted from the atmosphere, and obtained in a state of tolerable purity. In Brussels a factory for the production of

the gas for use in the illumination of the town commenced operations in May, this year, and is now furnishing a daily supply of oxygen for the illumination of the arcade (Galerie St. Hubert) and a number of shops.
—*Medical and Surgical Reporter.*

REPORT OF POST MORTEM EXAMINATION AT CITY HOSPITAL.

BY THAD. M. STEVENS, M. D., PATHOLOGIST.

J. S.—Colored—Head, throat and abdomen, examined. No abnormal appearance found in abdomen or thorax, except slight congestion of a portion of illium. Meninges of brain congested, the posterior portion of the brain substance slightly engorged, otherwise normal.

Mr. S.—Colored, husband of above—Abdomen and thorax normal, meningies of brain congested, base of brain substance highly congested, otherwise normal.

The history of these two cases are as follow :

The husband was taken sick upon Mondy, with chill. Great pain throughout the body, rapid supervention of delerium, and stiffness of the neck. Death ensued upon the following day at 8 P. M., and after removed to City Hospital.

The wife was taken sick on Monday evening, with about the same symptoms. No accurate analysis of this case could be obtained.

The son was taken sick upon Monday, also, with about the same symptoms. Was removed to Hospital, where he still lies, (eight days after). This case has developed into a well marked example of cerebro-spinal meningitis.

All circumstances indicate that the two cases examined were similar to the one now under observation. The system being overwhelmed by the force of attack, constituting four examples of the “fulminating” variety of this disease, death occurring before true inflammation superviened.

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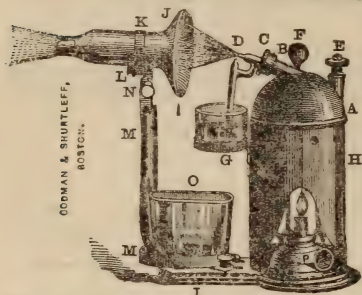


Fig. 15. Complete Steam Atomizer.

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It cannot be injured by exhaustion of water, or any attainable pressure of steam.

It does not throw spirits of hot water, to frighten or scald the patient.

Is compact and portable, occupies space of one-sixth cubic foot only, can be carried from place to place without removing the atomizing tubes, or the water, can be packed and repacked without loss of time.

Will render the best of service for many years, and is cheap in the best sense of word. **Price \$6.00.** Brass parts, nickel plated, additional **\$2.50.**

Neatly made, strong, Black Walnut Box, with convenient handle, additional, **\$2.50.**

Shurtleff's Atomizing Apparatus, (See fig. 5) for Inhalation, and with

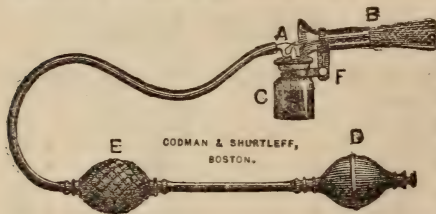


Fig. 5. Shurtleff's Atomizing Apparatus, Price \$4.00.

Patented March 24, 1868.

supplied with two carefully made annealed glass Atomizing Tubes, and accompanied with directions for use. Every Steam Apparatus is tested with steam, at very high pressure. Each apparatus is carefully packed for transportation, and warranted perfect. Also,—

Hand Ball Apparatus, (No. 5, without shield,) with two glass atomizing tubes. \$3 5

The Boston Atomizer, with two glass atomizing tubes..... 2 50

The Tremont Atomizer, with two glass atomizing tubes..... 2 00

Glass Tubes, to fit any of our apparatus, warranted perfect. 20

Nickle Plated Tubes, for Local Anæsthesia and Inhalation, each..... 75 cts. to 2 00

Rhigolen-, for Local Anæsthesia, best quality, packed 1 00

Nasal Douche, for treating Diseases of the Nasal Cavity, eight different varieties each with two nozzles..... \$1.20, \$1.50, 1.75, \$2.00, and \$3.50

N. B.—To save collection expenses, funds should be sent with the order, either in form of draft, post-office order, or registered letter.

[For complete illustrated price-list of Apparatus, Tubes, etc., see Pamphlet.]

[SEE NEXT PAGE.]







